



Chaos & Overload

Execute

Take action

Identify

THAKING THINGS FURTHER IN THE SPM JOURNEY

Creating the new journey into Strategic Portfolio Management and successful implementation through new tool design for useability

Liselotte Bormans
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Master thesis
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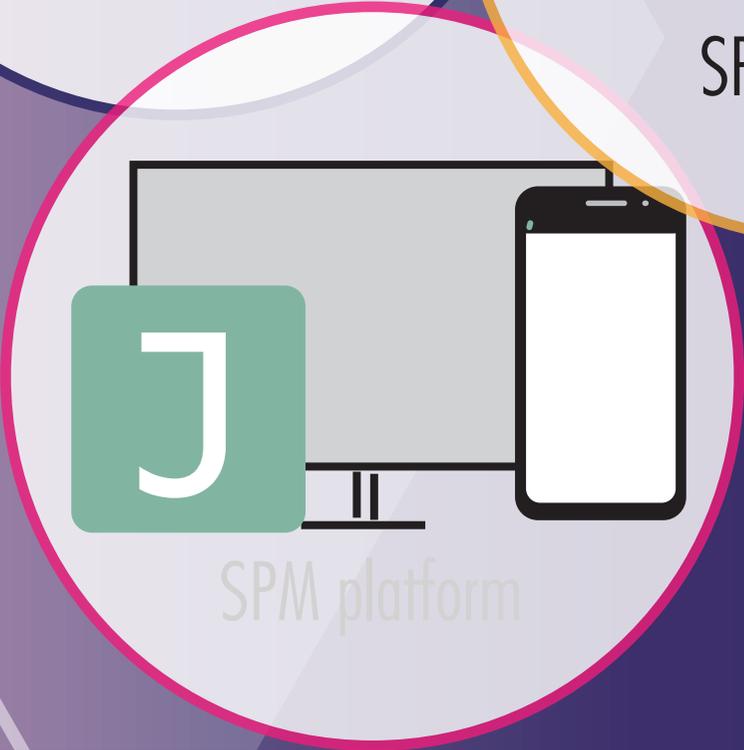
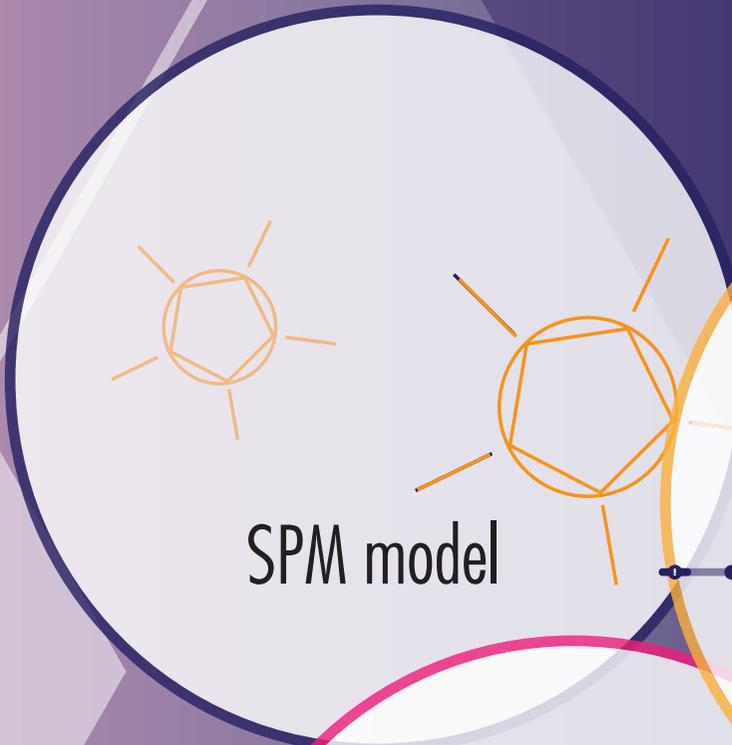
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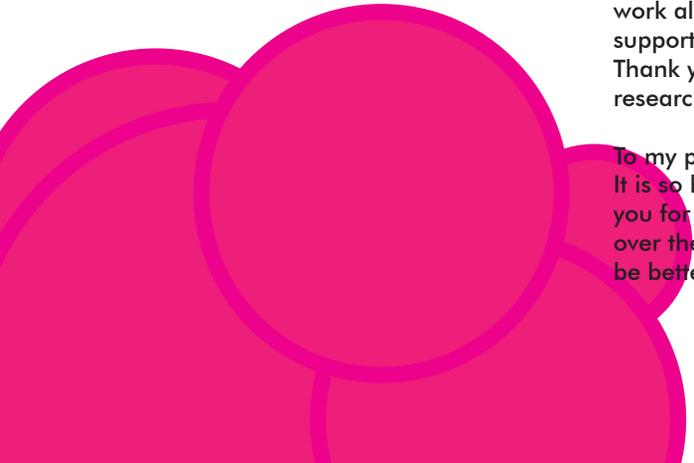
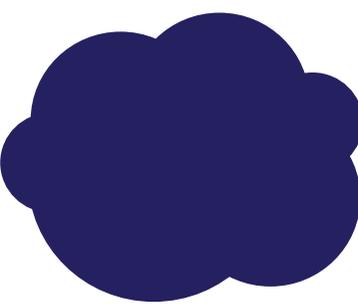
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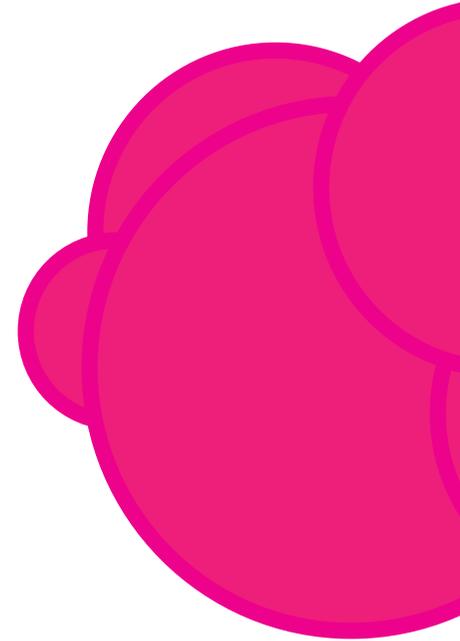
To my coaches, Peter & Pieter, for supporting me through tough times and just being there to talk with me when it matters. Starting up in covid-19 and not going to the TU Delft anymore was a challenging time to do a graduation project in. Even though we had to figure it all out in this new situation, in the end, I believe we tried our hardest to make it work either way. Thank you for being a sounding board and always wanting to make sure that I take care of myself and put health first.

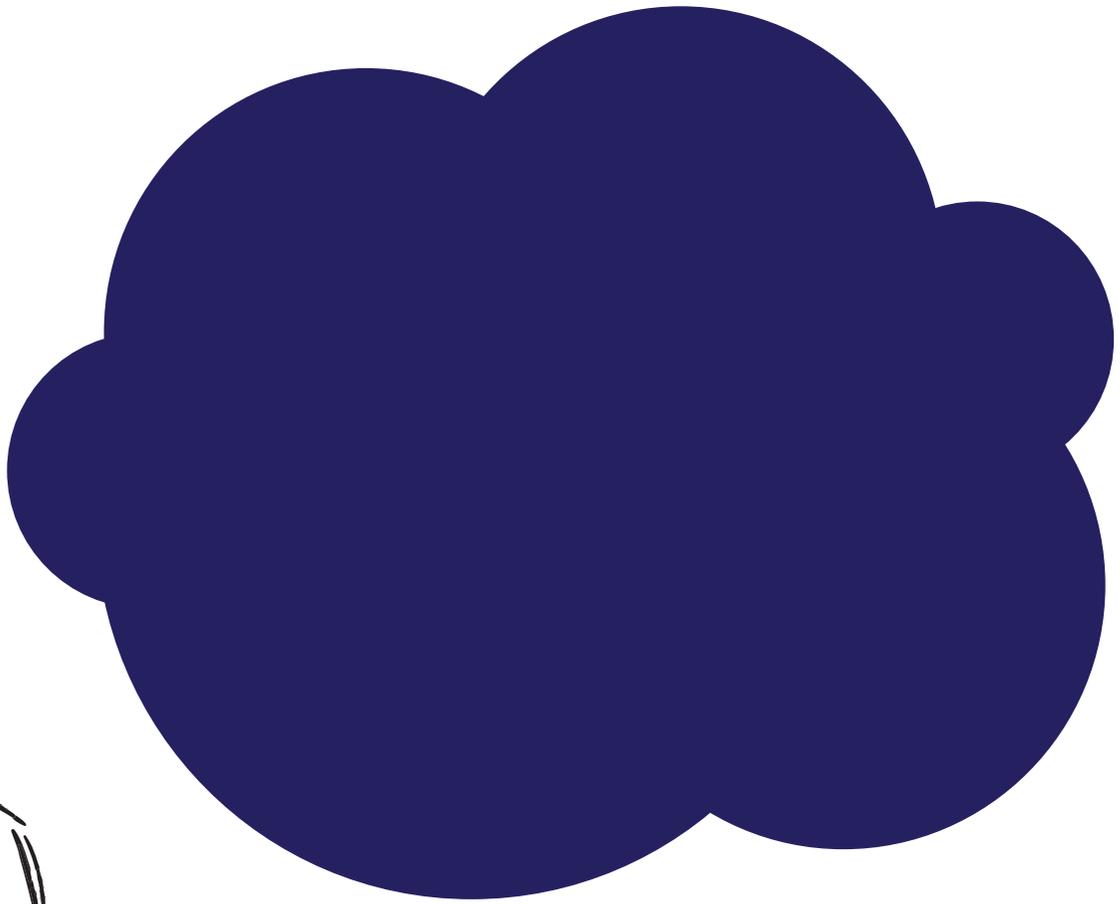
To my fantastic company mentor Linda, thank you for giving me this opportunity and introducing me to this new world of SPM. Your work inspired me to take on this project. You showed me the difference and value a SPD'er can make, not just by creating a few tools and work approaches, by impacting the whole organization and being active in a broad business context from a potato farm to high-tech innovation. Thank you for all the work you put into supporting this project and making some of my dreams come true.

To all of the Jigseye crew! I loved all the incredible work you are doing, welcoming vibes, letting me work alongside you and taking me with you in the Jigseye way of SPM. Thank you so much for your support of this project; it has meant the world to me!

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To my parents and friends, you literally helped me survive some of the most harrowing years of my life. It is so hard to step into a new role, phase and turning point, and you made it so much better! Thank you for your constant support, for putting up with me when stressing out and for taking care of me over the course of this project and through surviving covid-19. Family is someone who pushes you to be better even when you think you have reached the end of your tether. You are all those things to me!





Hi I am Liselotte

I am a Strategic Product Design (SPD) student from the TU Delft faculty of Industrial Design Engineering. I specialize in designing innovative and strategy-relevant outcomes by balancing market desirability, technological feasibility and business viability. My expertise is in design and business disciplines like branding, creativity, organisational science, service design and strategic design. Specific for this project is my impact on the journey in the early stage of stakeholder identification and easing in problem definition which contributes to the last stage of supporting the stakeholders in the execution of the Project Portfolio Management.

In this project, I will combine creativity with a systematic application of methodologies to identify opportunities while engaging the stakeholders in the collaborative design process.

Glossary

SPM

Strategic portfolio management

Users:

PL

project leader (or project manager terminology can differ per organization)

PM

Program manager (user with the task of managing portfolio programs, terminology by Jigseye SPM Methodology)

MB

Managing board (top layer of organization e.g. including CEO and COO)

Tools:

SPM model

Theoretical model from thesis used for organization's performance assessment for analysis and problem definition

SPM Wall

SPM methodology

Way of working for SPM execution by Jigseye

SPM App

New digital tool by Jigseye used for SPM methodology including the Framework and Metroview

UX Design

User Experience design approach and methodology

Summary

Organisations have a lot of trouble with managing their portfolio. The portfolio is the set of projects the company is currently running. The consultancy Jigseye provides tools for that purpose called Strategic Portfolio Management (SPM). They created tools to support organisations in creating that overview and the next step to manage it as a process. Currently, the SPM tools implemented by Jigseye work in practice. They notice that organizations still face challenges reaching successful SPM execution. Jigseye wants to improve and extend this set of tools. The goal of my project is to gain an understanding of the SPM tools and design for the new tools with orientation on useability and ease of use. In the research phase, I did extensive user research analysing the SPM tool resulting in user needs for functionality accessibility and the new purpose of creating strategic awareness. Leading to the following vision; the vision is laid out in the form of a journey, leading to new opportunities. This will increase both the effectiveness and efficiency of the SPM tools. Resulting in the New SPM Identity model and New SPM App design with Mobile version; with these tools, designing for a new way of working in the SPM journey leading to new service opportunities for Jigseye.

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Introduction

Organisations have trouble managing their portfolio. The portfolio can include a company client base or the services they provide, or the projects they execute. These are all variables combined in Portfoliomangement as impact area's, strategic goals and initiatives that contribute to them, providing an overview of the complete operation.

Nowadays, portfolio management has become very popular as organisations finally see the value of successful Portfolio management. The consultancy Jigseye provides tools for Strategic Portfolio Management (SPM) to support organisations in creating that overview and as a next step to manage it.

Organisations have to do something with their portfolio; this means there are approaches, and SPM is one of those methods. The consultancy Jigseye provides tools for that purpose called Strategic Portfolio Management (SPM).

From the design brief, it follows that Jigseye established a unique SPM process. They created tools to support organisations in creating that overview and the next step to manage it as a process. Currently, the SPM tools implemented by Jigseye work in practice. They notice that organizations still face challenges reaching successful SPM execution. At Jigseye they are always looking for new ways to improve.

Jigseye wants to improve and extend this set of tools. New tools for the SPM process are presented and implemented: being the SPM Model and SPM App. The impact of those tools is as of yet unknown.

Based hereon follows my vision because the new tools will provide an extension, opportunity, an ultimate journey can be created: towards an optimal way to use the new SPM tools that would Benefit SPM in terms of effectiveness and efficiency. The complete journey with the new tools will give the best result for Successful SPM implementation and execution.

The goal of my project is to gain an understanding of the SPM tools and design for the new tools with orientation on useability and ease of use. Designing for the tools through the new tool implementation does not impact a single moment but extend over a broader period in the SPM process. The entire SPM user journey is evaluated to analyse Jigseyes approach: considering the SPM process, client and tools interaction experience.

The challenge herein is to understand the SPM tools currently used and design for the new tools.

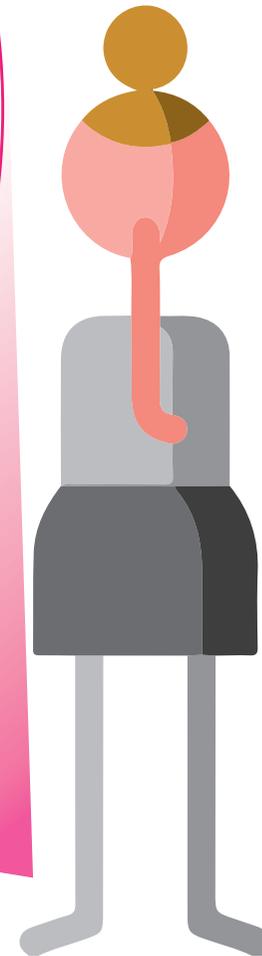
Establishing a basis of knowledge on the tools. The theoretical framework by Linda Kester's thesis is the scientific literature background for the SPM Process. The SPM model tool is developed based on that framework. Second, into the practical understanding of the application of the SPM tools. Initially, no userbase is available yet for user research because the tools are not yet in use. The project has to wait for the beta test. Going about the situation, taking a flexible research approach, the project is divided into two parts; exploration with both tools into peer evaluation, seeing what it looks like and reflecting on the findings. Followed-up, after tool launch, by user-research study with the actual users.

I did extensive user research analysing the SPM tool resulting in user needs for functionality accessibility and the new purpose of creating strategic awareness. Leading to the following vision; the vision is laid out in the form of a journey, leading to new opportunities. This will increase both the effectiveness and efficiency of the SPM tools. Translating the insights to design for the new SPM tools. Resulting in the New SPM Identity model and New SPM App design with Mobile version; with these tools, designing for a new way of working in the SPM. The new design creates new opportunities for Jigseye to extend its services.

My drive

It all started through another project in which I was working on PPM—herein introduced to SPM and realization that SPM is the way to go.

I first heard about Strategic Portfolio Management through one of my elective courses where Linda Kester performed a Masterclass lecture, discussing her experience as an expert on the topic of SPM. Her presentation inspired me, wondering if this might be the golden key at the heart of Strategic Product Design. My curiosity and enthusiasm led me back to Linda Kester, with whom I started this journey. This drive to learn and understand more about Jigseye's SPM is how I went through this project, seizing every opportunity to explore, gain insight and learn.



What I have worked on

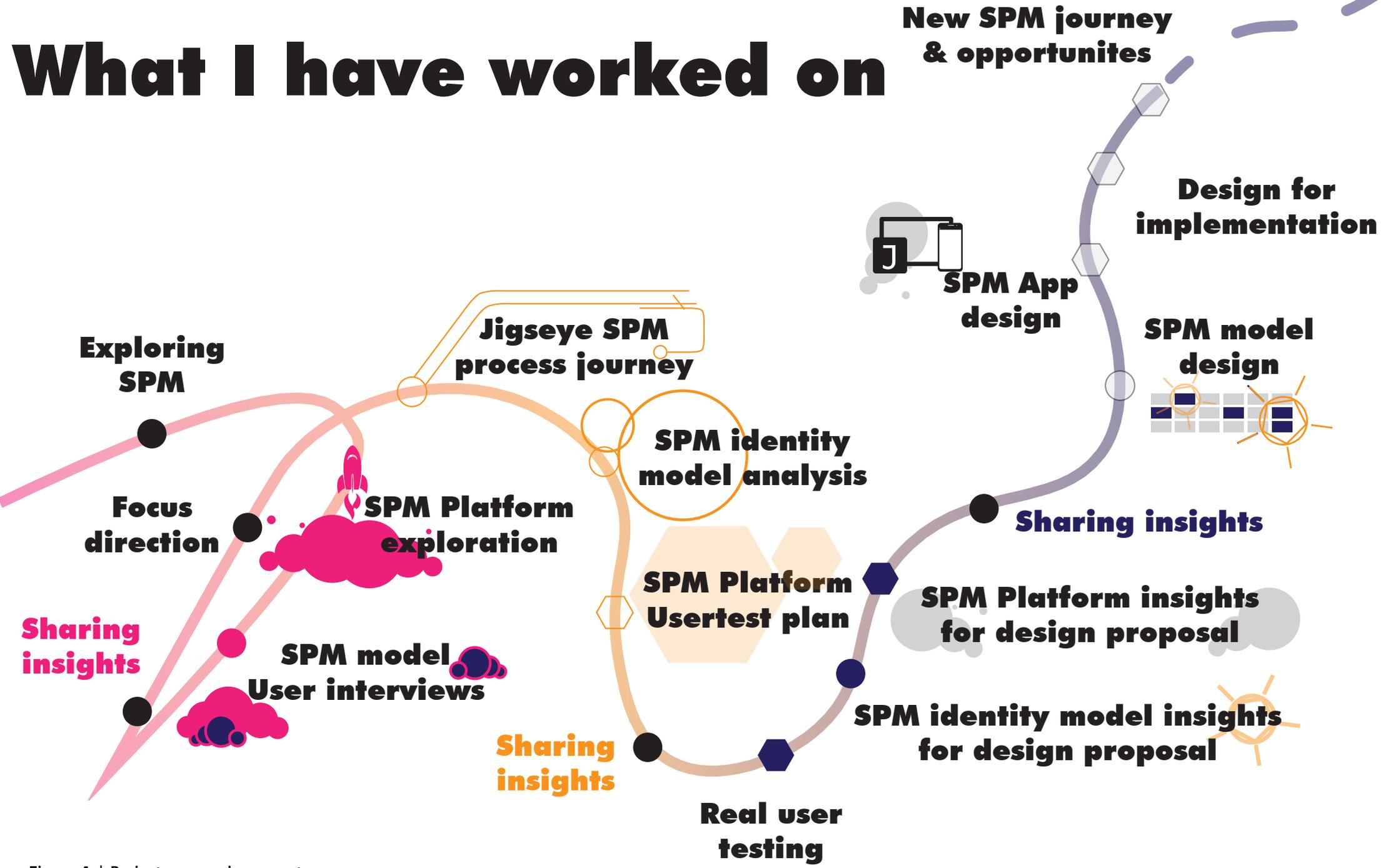


Figure 1 | Project process journey steps

Jigseye context and SPM tool ex- ploration

User research into new SPM Tool useability

Design for new way of working with SPM tools

New SPM journey and desing for new opportunities

Birds view into the project

The adventure of this project takes on quite the process journey. As shown on the left, visualising my journey steps in an abstracted sense, making loops, facing hardships, overcoming hurdles, and keeping going. All the visuals in this report are specially created for this project, showing the skills I developed, strengthening visual story telling.

The report will focus on sharing the outcome of that process.

Chapter 1 introduces the context in the business world of overload and filter failure. Going straight into the literature background on the SPM tools by Jigseye towards analysing Jigseye's SPM process. The central problem is defined. From here, defining entrance points for further analysis. The chapter rounds off with the design statement and vision direction of this project.

Followed-up with chapter 2 method going into the practical application of the tools with the research phase of the new SPM tools and starting with a short intro into the SPM methodology, providing a background theory for the way of working with the SPM tools and introducing the users. Next up is exploring the new tool, the SPM App beta version giving direction for the hereon continued extensive user-research concluding with entrance points for design.

The third chapter goes into the design phase, starting with the design goal and vision leading up to the idea behind the new SPM app tool designs. The new designs are explored, introducing an additional new user group, designing for the users needs and going towards a mobile App version.

From designing into implementation by looking at how the design can be used right now through the proposal for further development. Taking a side step towards the implementation roadmap proposal.

Finalising the project by taking a step back to go to the beginning to bring it all back together in the new SPM journey. Reflecting on the project in the discussion, highlighting the importance of this being the first user research case study into the new tools. Concluding with the impact and value statement of this project for Jigseye, future business and users, SPD students and you.

Overload & Chaos

1

Filter failure

INTRODUCTION INTO SPM

Jigseye's Solution SPM

Portfolio management has become popular over the years. Though Organisations struggle with portfolio management, meaning the inventorying and selecting of initiatives to execute. Doing so to make business progress and work towards attaining strategic goals. However, this process is faced with challenges such as misalignment often met within chaos and overload. Jigseye proposes a solution through the method of SPM and working with their tools towards strategy acceleration and successful SPM.

Introduces the context and goes straight into the literature background on the SPM tools by Jigseye towards analysing Jigseye's SPM process. The central problem is defined. From here, defining entrance points for further analysis. The chapter rounds off with the design statement and envisioned direction of this project.

New tools

Jigseyes SPM Process

SPM Tools

I know!

Design for effective SPM
through tool useability
optimization



Filter failure & Jigseyes solution

Organisations have trouble with managing their portfolio.

In this context, the portfolio is defined as the set of projects the company is currently running. Portfolio management is not a new problem, and it will not be solved from one moment to another. It is still being demonstrated through the numerous case studies into the innovation portfolio implementation ranging from the 1976 journal of general Management by Ansoff and Leontiades, to the recent publication by Garfein: Strategic portfolio management at Hydromax: Closing the Gap between Strategy and Results-A case study (2021, July).

The field of design is changing, from making chairs to becoming the Chief Strategy Operations (CSO). Products and markets are increasingly complex: due to increased heterogeneity and product/service integration, it becomes essential for success to make strategic IT (innovation) decisions, Kester en Schasfoort, 2018. To stay valuable, we need to adapt and change to the world around us continuously. To quote Jim McNerney, Chairman, President and Chief Executive Officer of The Boeing Company: Strategic Portfolio Management is all about charting the course, translating strategy into workable plans, and delivering results (Lunsford, 2006, B1).

However, Businesses have a hundred or more project initiatives going on, and everyone is busy. These initiatives are all over the place, directed top-down and potential from bottom-up. Some arise from a personal desire, known as pet projects. In summary, there is no alignment, and projects keep popping up from anywhere, of which only a few hit the strategic goals. The organisation is just continuing to work them all, with no overview or selection guide; this is overload.

The value of portfolio management is demonstrated by Markham and Lee 2012 PDMA comparative performance assessment study (JPIM). They are stating that 80.7% of best practice firms actively manage their innovation portfolio and need fewer ideas for one success by focusing on developing the right new products and services.

That is where SPM comes in, providing a steady guided approach and a working method towards strategy execution. As Jigseye say, it is not overload; it is filter failure.

Strategic portfolio management (projects from and leading to the vision) is a construct for reaching your strategy and vision, keeping your eye on the goal. Currently, there are no companies who succeed in Portfolio Mindset, Focus, and Agility named as the overarching theme of effectiveness in the SPM model developed by L. Kester (Kester, 2011; Kester et al., 2014 ©). They observe from practice that for business, making portfolio decisions is difficult. For example, they are seen in setting priorities, a bias for looking at short/long-term goals and aligning project decisions with a too abstract strategy and lack of focus. Supported in the findings by Stankovic, L., & Djukic, S. (2015) in their article on Strategic innovation portfolio management 'In decision making process, enterprise's management is constantly faced with challenge to allocate resources and capabilities as efficiently as possible, in both short and long term.' That is where Jigseye makes an impact; targeting the three goals of portfolio success, namely strategically alignment, balanced and maximising value.

This project does not go into further literature analysis on problem setting context because that is out of scope for this project. After all, I want to focus on the context of Jigseye, where they are active and how they approach it.



Figure 2 | Organizations are in overload and chaos because there is no alignment, selection nor guidance on Portfolio Management: it is Filter Failure.



PPM

Project selection & decision making



SPM

Strategic decision making (looking at the bigger picture)

The confusion between PPM and SPM

I was introduced to SPM through another project, starting from the point where the organisation was looking into PPM. SPM can easily be confused with PPM, as was the case in my previous project and how I learned about the value of SPM.

To explain it in my own words;

PPM is inventorying project initiatives from a bottom-up perspective, meaning collecting everything, the big bulk of initiatives and projects, currently running, finished and to come, sorting with which goal or strategic box they fit in. Often there is no selection or filtering process involved, purely an all-encompassing list of projects.

SPM is strategy-oriented, starting from the top, working down to goals definition and organising and selecting only projects from the bulk that contribute to the strategic goal attainment. SPM takes it a step further by also analysing, and if needed (re) defining the strategic goal the organisation should work on, from background studies such as market research and company competency analysis (what area are they active in) reflected on current trends (the world around them).

It is a very different orientation, approach portfolio management, mindset and way of working but unfortunately, the terms look alike and are not well distinguished in common knowledge. As encountered in my previous case, the project owner initiated the collaboration from the point of desiring to establish PPM in the organisation; eventually, through the project, our team found out that what was actually needed was SPM.

This graduation project arose being inspired by that experience, enthusiasm and conviction for SPM being the ultimate golden grail a SPD designer can aim to reach; viewing the organisation as a whole, strategic envisioning, the power to bring change

First steps into Jigseye's SPM

This project focuses on the context of Jigseye; their SPM process approach, the understanding of the SPM methodology mindset and tools they implement. To understand these, I dive into Jigseye's scientific theoretical basis founded in the literature of L.Kester thesis (Kester, 2011; Kester et al., 2014 ©). Furthermore, for a general understanding of their SPM approach and tool application client cases are explored, these are not open publications. Note hereon that Jigseye tailors their approach to the client resulting in dedicated documentation in the form of short reports, user guides and presentations on SPM methodology and tool implementation for the client. The focus herein is understanding what the SPM methodology entails and how the tools relate hereto.

About Jigseye

Jigseye is a rapidly growing consultancy that proposes a method for successful SPM. They specialise in accelerating strategy transition executing, e.g. supporting an organisation in getting from point A to point B of their strategy through Strategic Portfolio Management. Jigseye focuses on guiding businesses towards reaching these elements through collaborative sessions using their Strategic Portfolio Framework® methodology. The result of the collaboration is the introduction and implementation of effectiveness and an improved project portfolio.

Jigseye builds their expertise based on a solid basis of theory embedded in L.Kesters scientific research and applied business expertise in years of experience transforming organisations by co-founder S Schasfoort. They developed an approach and tools for successful SPM implementation and execution. Moreover, these tools are on the next page.

The consultancy is active in a wide area of business applications ranging from potato farms taking into a genetic modification to product innovation at A. The portfolio chaos is seen everywhere, demonstrating the broad orientation and application of SPM. Furthermore, the SPM approach and tools have been proven effective in establishing SPM in these varied contexts. Implying that SPM is for everyone, meaning that the tools developed by Jigseye are applicable and for a broad audience, being understandable and useable.

Figure 3 | Jigseye provides a process to get from strategy to projects and work on the right projects for the strategy (visual by Jigseye)

Figure 3 | Jigseye's physical tools: the Framework and Metroview in SPM
Meeting context

The SPM tools

For this project, I focus on understanding and gaining insight into the SPM tools because they play a key role in supporting and successfully implementing SPM by Jigseye. Therefore, for the literature study, my aim is to becoming knowledgeable on how they work and are used toward that goal—to that aim, taking Jigseye and thesis as leading input to this study, zooming in on the three tools as mentioned above and Jigseye's role in that process.

Diving right in, introducing the tools starting with the SPM model followed by the Sessions resulting in the plan being the SPM Framework and SPM Methodology supported by the Metro view. An abstracted representation of the tools can be seen on the right.

L.Kesters thesis New product development portfolios: Identifying the antecedents and consequences of decision-making processes is the theoretical framework and primary literature reference; the SPM tool is developed based on this framework resulting in the SPM model. The tool is developed for objective problem identification in business performance.

Enhancing the process of strategic transformation

With the problem definition in mind, looking at the Jigseye SPM process and new tool addition followed my idea of looking at the SPM journey as a whole.

The aim I set out with is to enhance the process of strategic transformation through effective SPM, which focuses on extending and completing the StrategicPortfolio Management [SPM] process. Leading to the vision of Creating the new journey into Strategic Portfolio Management and successful implementation through new tool design

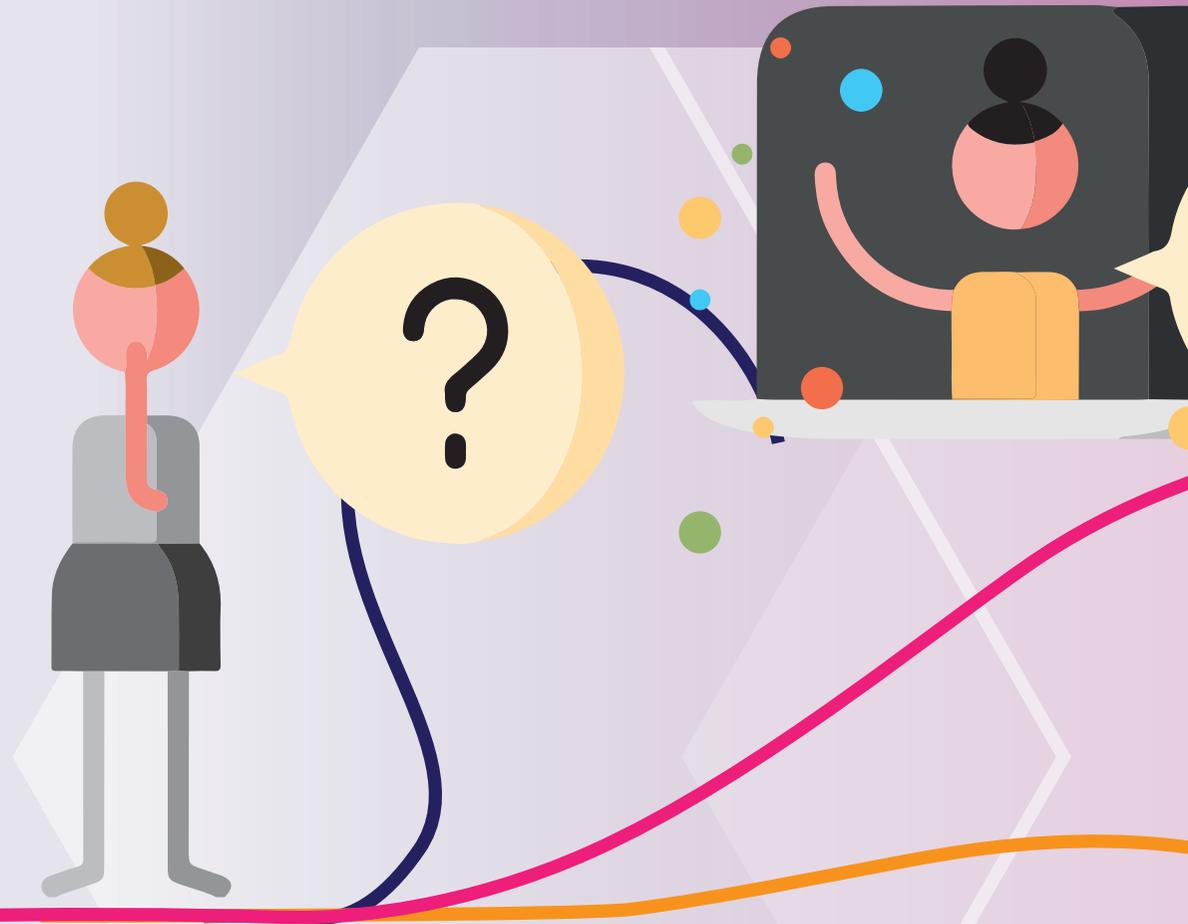
for useability. This will increase both the effectiveness and efficiency of the SPM tools.

Based hereon, I aim to design for ease in and support after (also named in this report as ease-out) —accelerating the SPM execution through looking at the process as a whole, by (creating the before and after) designing the EASE IN and SUPPORT AFTER and doing so by designing for the useability of the new SPM tools that through implementation will provide in starting with and execution of more effective/successful SPM.

The project will dive into the how-perspective; by designing for the usability of the new tools, way of working with them and extending the SPM process journey. In order to do so, studying the new tools to establish an in-depth understanding of them on purpose, application and user interaction experience. The insight gained by awareness of the context, Jigseyes SPM process and current tools, functioning as a background knowledge basis supporting the understanding of the new tools and the ability to place them in user context, empathising to their experience.

Figure 6 | Vision for the new SPM Journey implementing the new tools creating ease-in and ease-out

2 METHOD

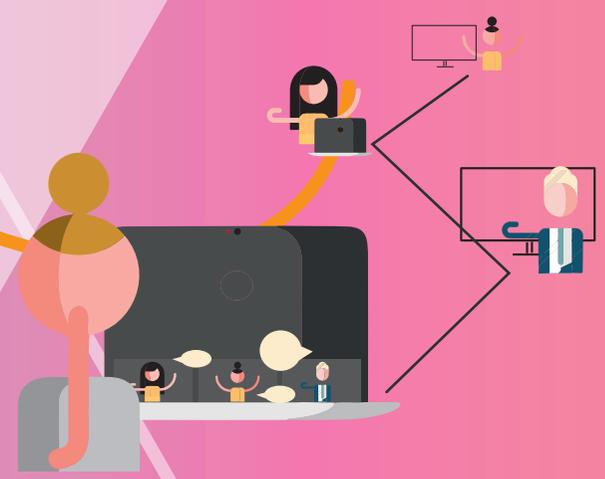


Now that we are familiar with the basis of the SPM tools, let's see how the SPM model and SPM App are applied and used in real life?

A point of attention is the usability of the tool. The challenge herein is understanding and improving usability. This was not easy because the SPM App is still in Beta-development. To push forward, the project tackles 2 phases. First going into initial exploration: trying the new tool out myself, analyzing it from a user perspective and reflecting on the findings. The outcome provides the basis for going into the user research. Second, after the launch of the SPM App, going into user experience research studies with the actual users. As a goal, to gain insight and understand the user needs by observing and interviewing the user experience.



finding leads



SPM Exploration

Before going into the SPM App tools user experience, it is paramount to get a feeling for the context in which the new tool operates and by whom. Earlier analysis already introduced the tool as a part of the SPM implementation and as a supporting tool of the SPM methodology in execution.

Exploration step 1: SPM Users and Methodology

So let us take a closer look at the SPM methodology and the tasks the users will be doing with the SPM App. Therefore need to know who the users are and their role in the SPM process.

Furthermore, in preparation for the user research for the App, it is essential to know who are the stakeholders involved and, secondly, who hereof are the users. They are the potential participant group.

Sketching an overview, using stakeholder mapping, of the parties involved reveals several relations. First of all, the SPM app is being externally developed for Jigseye. In this analysis, they do not belong to the user group and therefore are not the primary interest of this project; if interested in knowing more, view Appendix 3.2 SPM App exploration. For simplification, showing one client, in reality, Jigseye collaborates with various organizations simultaneously. Consequently, the SPM App will be used by multiple client organizations. Within the client organization, taking a closer look, a specialized group provides input to the App and is involved with strategic projects. They are the Project team, Project leaders (PL), Program managers (PM) and Managing board (MB). Each group is visualized and described by involvement in and responsibilities. They each have specific and different tasks; view the left side of figure 7 for user group description. This information is based on documentation provided by Jigseye. These stand in direct relation to the usage/interaction of the SPM app.

SPM App user audience

The project team is not considered a user of the App as follows from Jigseyes initial design idea. The SPM App will be used by the 3 (over-arching) management layers (or more depending on the number of management layers). Therefore, consider the PL, PM, and MB users as the leading interest group and thus the research target/potential participant group.

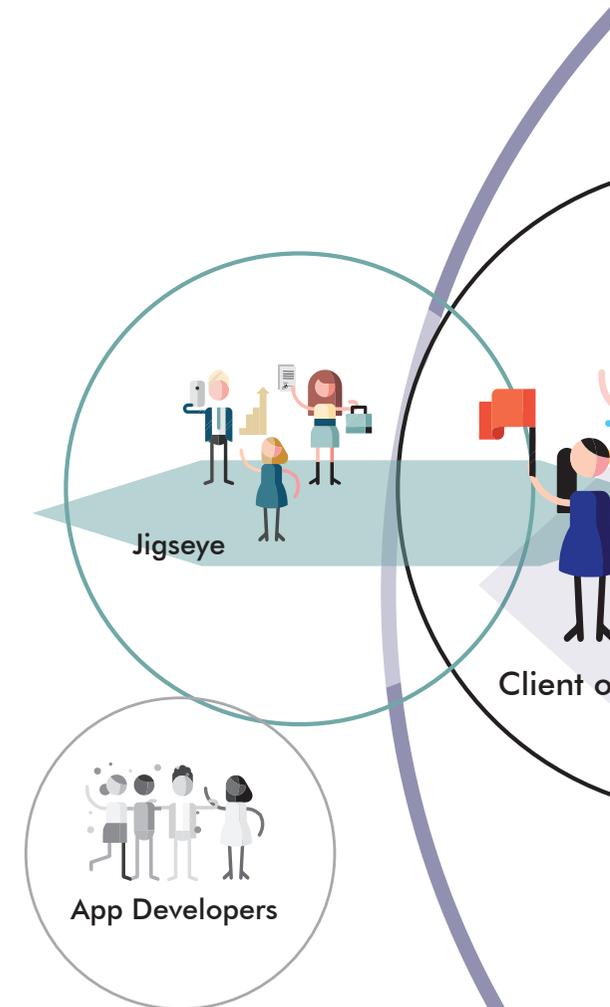
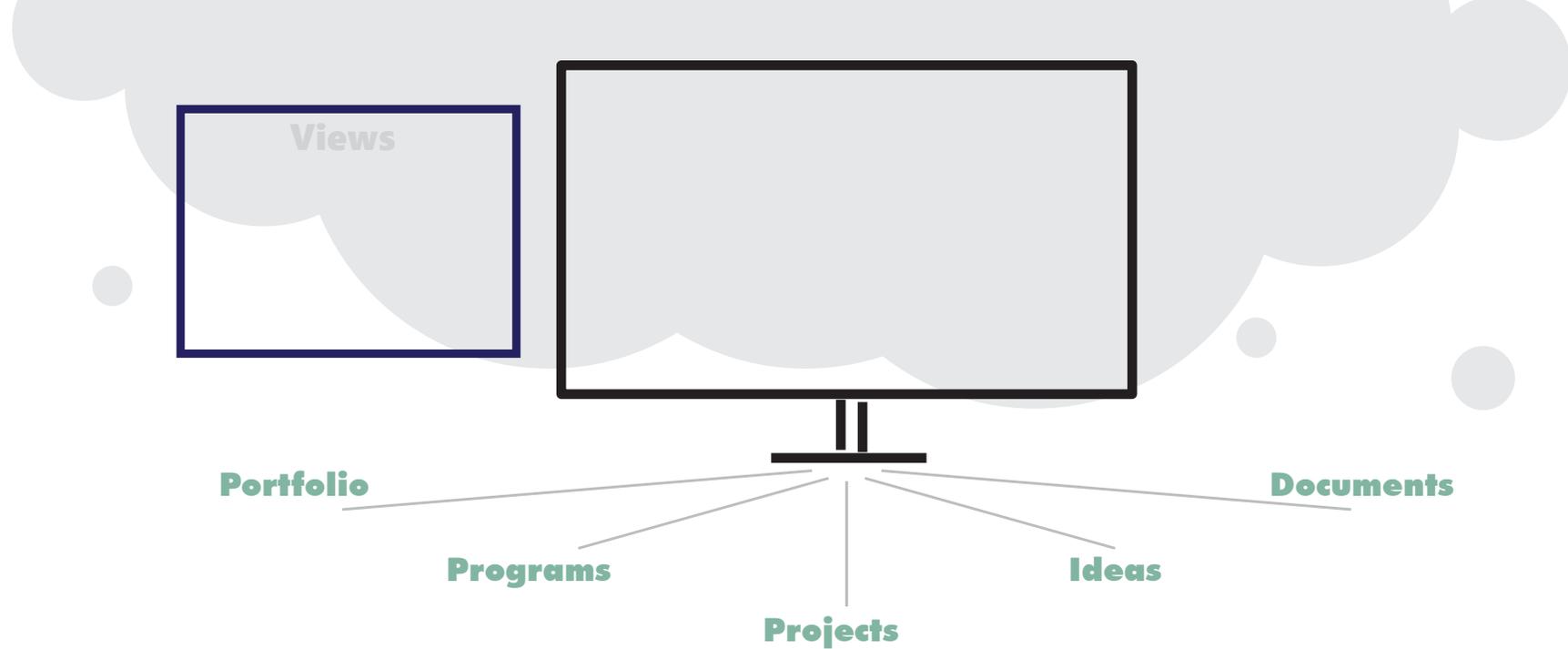


Figure 7 | Stakeholder mapping portraying the select group of employees that will be using the SPM App, including clarification on their role in SPM





Exploration step 2: SPM App tool

The exploration of the new tool is to understand the application and purpose of the SPM App. Gaining insight in what the tool entails and developing an understanding of its usage.

The importance of the exploration phase is in preparing for the user research:

- In the context of knowing what product you are testing with, in order to design a research approach.
- Finding interesting angles for the research to zoom in on, for example, a particular screen or feature that is of particular value to the SPM methodology. In doing so, developing assumptions that lead to questions for the research.
- It contributes to establishing an understanding of the user experience.

Especially later in the user research, be able to empathize with the user. Doing so by showing knowledge in SPM methodology, show understanding towards the user and their experience with SPM.

Since the App is a new tool, I had to wait for the Beta version for user research. Because the tool was not launched yet at this time, there was no userbase available yet. Therefore, going into initial exploration with the SPM App, e.g. evaluating what the tool looks like and taking a critical view towards interaction experience, taking on a user perspective.

Figure 8 | Overview of the 8 SPM App screens

Introduction

The addition of the SPM App is a new concept. Therefore the influence on the current SPM journey is unknown, and so are the user interaction, experience and implementation hereof. Its main functions and uses are based on the physical SPM framework and Wall, now with the benefits of being digital and more functionality. This tool is used after the sessions with regard to the SPM process to support the SPM methodology and execution of the strategy transition.

Focus: what to look for

An important aspect is that the SPM App has not yet undergone any user research nor interaction experience testing. Nor is there any documentation available on the SPM App development process. These are some of the reasons why this study has value because it is the first time the SPM App will be user tested and have documentation to build on for continued development and design.

Looking at what the SPM app is, since it is a new tool and I have never seen it before, I need insight into what the tool entails, especially for a user research phase basis. Second, since the App aims to impact the execution phase of the SPM journey by supporting the implementation and execution of the SPM methodology, analysis reviews the related action between the tools and how to enact them in the App. Overall, additionally, points for analysis are based on UX/UI analysis points from the Interaction & Electronics manual by Herrera and van der Lelie (2018, February).

What did I do

Taking the approach of UX/UI following general guidelines by Herrera and van der Lelie in their Interaction & Electronics manual (2018, February). Following the herein proposed construct for Peer testing with the SPM App tool, in which I embody the role as 'peer' reviewer. Testing for both interfaces and all design aspects intended to be tested, such as interaction experience. The test uses the templates by Herrera and van der Lelie as a guideline for aspects to take note of. For example, positioning of elements and the general look and feel of the App tool.

The Exploration study, rebranded as 'my first impression', analyzing the whole App and developing area's of interest for further research. Highlights are interaction pathways, the look and feel of the App through style and which elements are of primary interest to the users, e.g. will be most intensively used. Additionally interesting to view how the digital tool works in combination with the SPM methodology; even though the tools are very similar, digital is still a different manner of interacting and opens up new possibilities. For example, as discovered, being as always at hand through screen sharing for digital meetings.

Here are some of the findings from the exploration analysis with the SPM, highlighting the most exciting aspects. There were many more findings from this analysis, too many to all share here—view appendix 3 for the whole exploration taking apart the App piece by piece.

Analysis focus 1: what is the SPM App, build-up, what functions does it contain?

Analysis focus 2: how does the App support/relate to the SPM Methodology

Analysis focus 3: Overall findings on UX/UI design

Findings

The SPM app includes the physical SPM tools and additional supportive features such as a dashboard and project list are new to the tool.

Initial ideation

The exploration analysis also incorporates initial ideation, coming up with solutions and new feature proposals addressing the found problems.

One of these ideas proposes the Logbook, a feature in which the user can prototype the influence of inputting new initiatives in the framework supporting the decision and selection process in SPM meetings.

One of the initial expectations I had for the SPM App was there to be a Mobile version. The App can be viewed through an internet browser on your phone, but it is basically the PC version scaled to fit on your tiny screen, which does not look nor work comfortably. That is why I show the PC and mobile, representing both design opportunities. Some of these initiatives have been selected for direct implementation by Jigseye. All analysis findings and initial design solutions can be found in Appendix 3.3 SPM App Exploration.

The exploration Analysis of the SPM App tool result is in designing the SPM App user guide, Appendix 3.4. The guide is a comprehensive overview of the App features and purpose. Herein providing interaction instructions and support. The guide aims to provide a manual for the users to help them learn initial interaction with the SPM Guide, accelerating SPM App implementation in business. The guide highlights an explanation of the user's primary interaction of updating and inputting project progress and, through visualization, guiding the users through the interaction steps needed to reach their goal in the App.

Conclusion

the exploration analysis yields many insights and support in establishing a basis for understanding the purpose and interaction of the tool. This study's three most interesting points are: focussing on user needs, interaction pathways and walkthrough and visualization leading interaction.

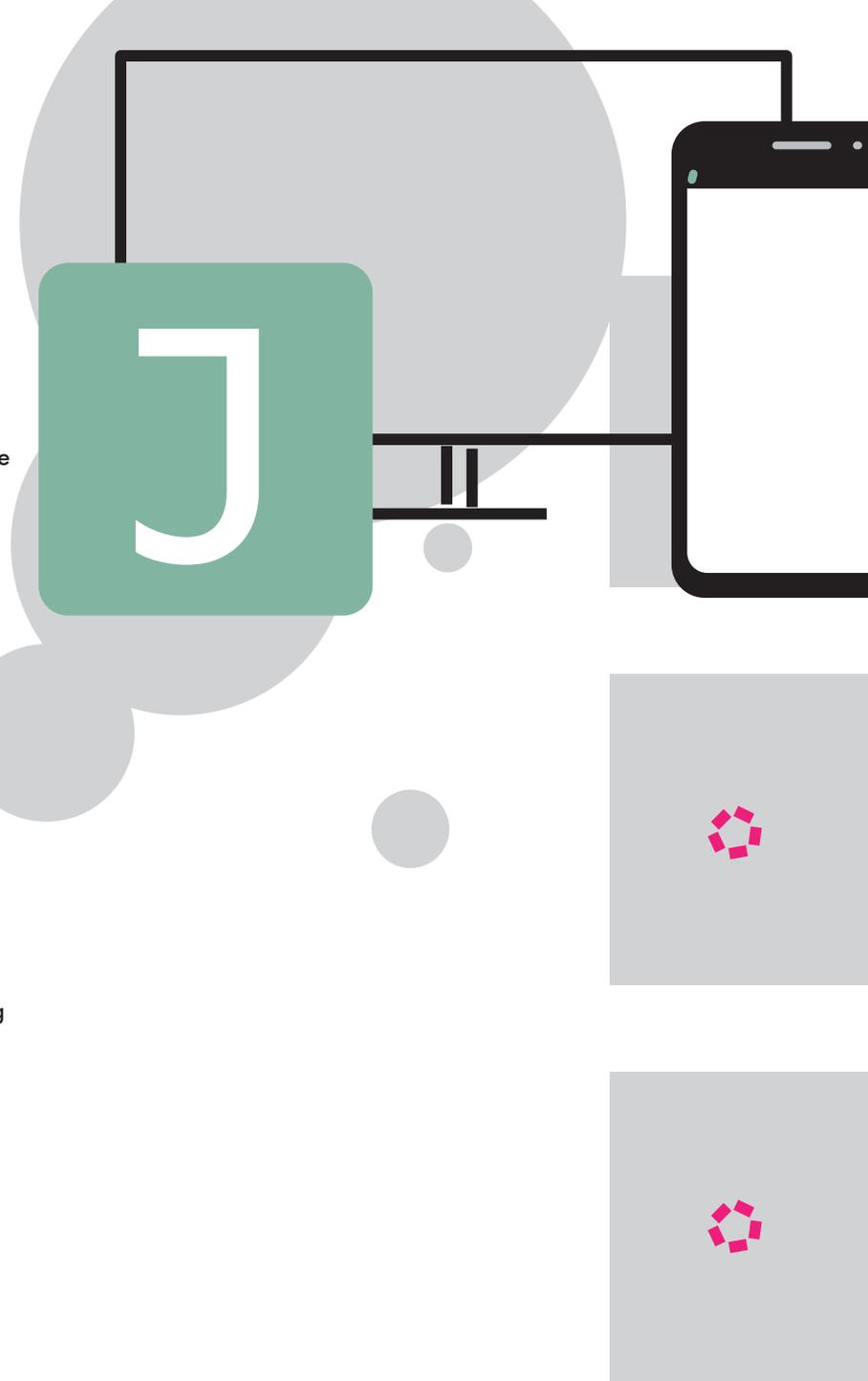
Into user research

Placing useability central, the user research should focus on the user experience, especially concerning the interaction relation with the SPM methodology.

The first area of interest is to continue investigating the tool's ease of use by evaluating intuitive user experience and linking to creating an as low as possible threshold to use. This is one of the aspects I noted from exploring that navigation towards specific functions was unnecessarily complicated and excessively long. Overall, this encompasses looking into users' first impression of the App, reasoning that a positive first impression will stimulate starting and continued use. Since it is a new tool, capturing the first impression just like this exploration yielding interesting findings.

Second, because the tool is new, getting insight into how the user will use and experience the App is paramount for understanding their needs. Furthermore, considering that the use of the tool will be most prominent when it is fully implemented and intensively used by the whole organization.

Third, directly linked to the above is gaining an understanding of the interlinked play between the online&offline interaction experience with the SPM methodology and the new way of working with the digital SPM tool.



Into user research

Now that the SPM App is ready for use, initiating the user research phase after Beta-version development. Starting from the three areas of interest resulting from the exploration of the SPM app: first impression, in-use and online&offline interactions. I want to add hereto another reason why this research is essential; the application should encourage the user to adhere/hold on to the SPM methodology. Not using / or inadequate use can potentially hinder the strategy execution of the organisation. That is why the use (logical, simple, intuitive) and the user experience are crucial.

Resulting in the three paths I want to investigate further, What are the user needs, How do they use and what are the interaction pathways, and How do the online/offline work methods and interaction collaborate/mix. Central: How is the new and optimal way of working experience with the SPM platform? Based on the central questions from the previous user testing set-up and approach documents, coming up with the research questions:

How to create an optimal digital user experience with the SPM application?

Sub questions for research:

1. How do users experience the usage of the application? (What aligns/ misaligns with their expectations?)
 - a. Does the current design of the application enable intuitive and logical use?
 - b. How are the current interaction pathways experienced, and where can they be improved?
2. To what extent does the application usage support the usage of the SPM methodology? (I.e., if users get frustrated, or the application does not give them what they need, then the whole methodology potentially falls apart, which then may hinder the strategy execution of the organisation)
3. How does the online usage interact/complement the offline usage of the SPM working methodology?

To summarise, this research is about discovering the new and unknown the application brings with it and its impact, focussing on the use and user experience to design for the new and optimal user experience and working with the SPM application.

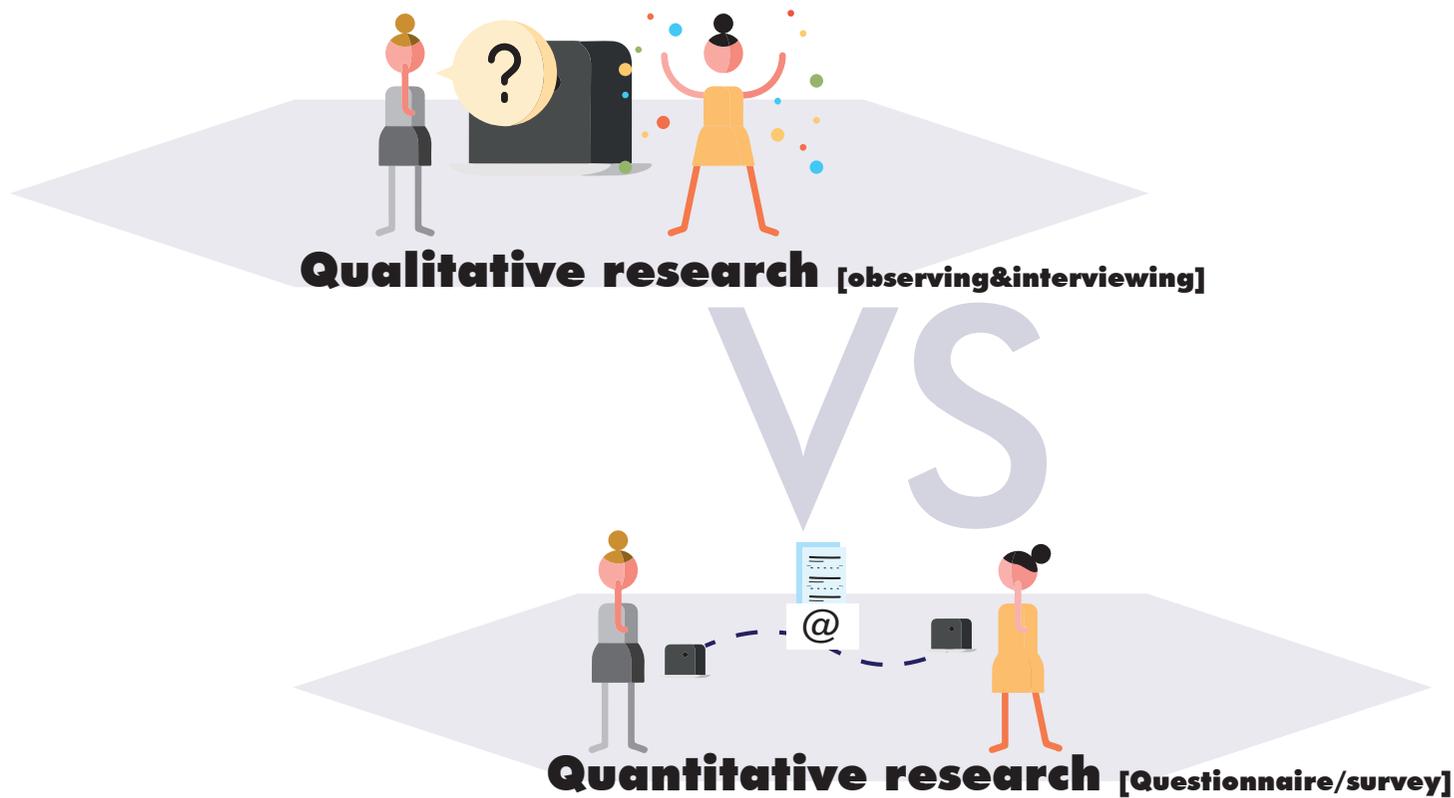


Figure 10 | Weighting Qualitative VS Quantitative research approach

A qualitative approach to research

Choosing a Qualitative approach as the primary domain for this research. It is well suited for answering the research questions and provides a lot of freedom and flexibility for creativity in the research construct.

Qualitative research is set up to be broad and flexible to answer open questions that need explanation. The main goal is attaining insight into the usability and interaction experience of the SPM App; I want to look into the 'how?' of things resulting in open RQs for which Qualitative is best suited. I aim to capture user experience, which is intangible variables unlike asking about liking the colour of something are better analysed through Qualitative for example, rating through a Quantitative questionnaire. Qualitative research is more suited to small groups, fitting the small (expected around ten users) participant group available to me for this research. There is a higher potential to find unexpected leads in a Qualitative approach because you are freer to adapt to the situation. For example, in an interview or observation, unexpected events can happen that might show new insight.

Research approach

The research will take a qualitative approach aiming to gain in-depth understanding and collect knowledge on the user experience of the SPM app. The study will build on my experience in generative research techniques based on Sanders and Stappers (2018); taking a qualitative approach applying theory on gathering data in the field, dealing with messy data and from in different media as well.

Hereof immersion in the data is an essential aspect for later designing.

Important to consider as a central element in this research is that the SPM App is a new tool; there are still many first times and unknowns. This study is the first-ever user research conducted with the SPM App.

Target audience: collaboration with A

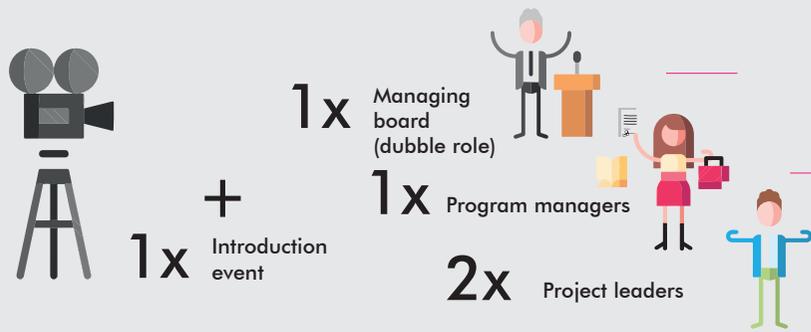
Collaborating with the research business is always a challenge to get their cooperation and support for the research as they also have to put effort into it. This research collaborates with a long term client of Jigseye, namely A. They have agreed to collaborate to test the SPM App and provide feedback compensated for in using the tool freely. The users of A are familiar with the SPM methodology and tools. The participant group will be further detailed in paragraph on Dta collection.



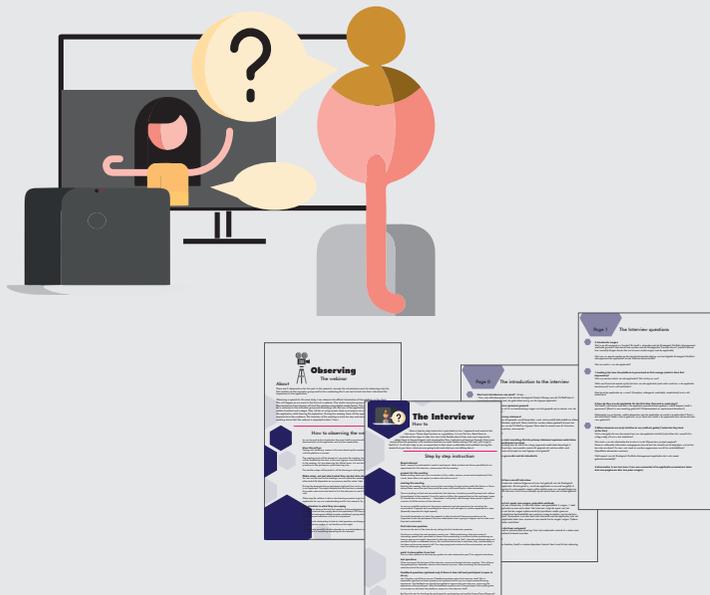
Individual interaction experience tests



Figure 11 | Research approach visualization: Observation event & individual tests



Minimal needs & input lead



Minimal needs & input lead

During the testing, research might come across a fascinating insight to further follow. Sparking a different direction to follow than the intended initially plan. To have the room to pursue these possibilities, I propose to have a flexible testing set-up.

The study implements an opportunistic sampling approach due to the small test group available from

A. Taking the approach of testing for minimal needs and input leading. Meaning the focus will be on attaining the minimally needed insights to continue with the design. The first user test is both viewed as a pilot test, and the gathered data is also used for the study outcome, optimally using resources. Moreover, the thoughts behind the set-up can be found in appendix 6 SPM App user testing set-up.

2 Phases: initial and intensive user experience

From the defined area's of interest as stated in the research questions, it follows splitting the research into two directions;

The first direction considers the first-impression experience of the App, with the underlying thought that starting with the App is the first barrier the organisation faces. As argued by Hultink & Schoormans (2004) on the importance of a product first impression, you can never have a second first impression. The threshold should be as low as possible, such as through intuitive use, else the App will not be used and fails early on. To understand these barriers in first use, observing initial use with the App and capturing that first impression expectations /intuitive use is of interest.

The second direction focuses on the intensive use of the App; when the users have used the App for some time, it has become a regular practice. The intensive use encompasses the App user experience, as this is how they will be primarily using the App. It delves into problems and barriers they face in the interaction experience, aiming to gain insight to support continued use.

In summary, the research looks at two timestamps in the App's usage: initial and intensive use. Each is developed into a research phase with a dedicated testing approach. The phases outline will be discussed in paragraphs Phase 1 Initial use approach and Phase 2 Intensive use approach.

Inventive user-research in Covid-19

Considering the setting of the tests in the current circumstances of Covid-19 safety rules, it is very different from usual. Coming up with creative solutions, I adapted 4 test settings for this research: observing with screen share, interviewing through Skype, digital survey and generative methods. View paragraph Data collection and Appendix 6.3 user research guide, detailing the considerations taking. The research will be conducted through online media, using Microsoft teams, Zoom and regular email. This way, I can guarantee covid safety distancing for both parties involved while continuing research. This study is my first time researching through online media. It will be a different experience from a traditional face-to-face real-life set-up, with which I am familiar. That is why I view this as a learning opportunity. Along the way, this leads to needing to adapt approach and flexibility in the research.

The guide

The study's approach is captured in a detailed guide for research productivity, included in appendix 6.3. The guide includes background theory, informing the researcher on the tools they are working with and what goal in mind. It supports the researcher in conducting the research, providing a detailed step by step guide to follow. Speaking from experience, having a guide at hand during the research allows preparing beforehand, providing a construct to rely on, stimulating confidence that shows in performance coming across professionally. Creating the guide contributes to establishing the research construct and envisioning how the research will take shape, what to prepare for and how best to guide the participants through the interaction testing experience. Within mind, to provide a positive research experience for both the researcher as the participants.

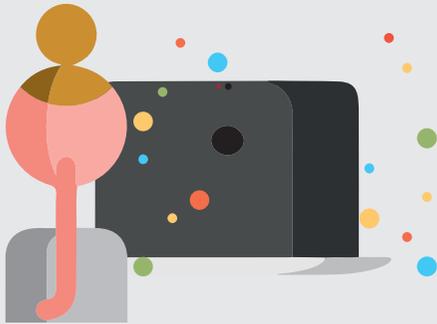
Phase 1 initial use approach

The first test phase is all about first impressions, and as they say: there is no such thing as a second chance for a first impression. In earlier chapters, referring to this phase as 'The first impression'. It focuses on the first impression the application gives, looking into the first-ever launch of this application with the App's users for the first time. The scope is widened to the initial user experience, referring to the period of users first interacting with the App.

Relating to the main research question, the first RQ is applicable and to answer through this user test phase. The test phase consists of three parts; observing the Launch event/introduction where the users get the first glimpse of the application, followed by individual testing, including interviews and interaction observation.

Observing the application launch introduces a unique opportunity to observe how Jigseye introduces the product to the client and user. Furthermore, observing their first impression can only happen the first time they see it, which is at the introduction event. Unfortunately, there is no opportunity to incorporate testing into this event due to the time limitations of the meeting. Observations of their reactions during the event will provide initial insights into their first impression. After the event, they will take the App into use, transitioning into the initial user experience. The individual research, including the second and third tests, will focus hereon. The interviews focus on the user's first experience of the App when they start using it themselves. The construct incorporates the App interaction observation and the 5-sec test into the Interviews. It is a later addition to the study based on the positive participant feedback in the pilot test. The interaction test implements the 5-sec test approach, highlighting what elements of the App leave an impression and conveying their purpose clearly.

The results of this test phase can contribute to a better understanding of the current situation of SPM, improving the introduction process of the App tool to clients, design for improving the first impression and providing design leads to creating the optimal digital user experience.



LAUNCH EVENT OBSERVATION

Starting with the Webinar in which Jigseye will introduce the App to the innovator group through a Teams meeting (digital meeting). Herein they will go through the application, showing and explaining the main functions and interactions with the application using screen share. It is the first time the client users see the finished product. Due to the limited time, there is no opportunity to ask questions during or afterwards, meaning observing only.

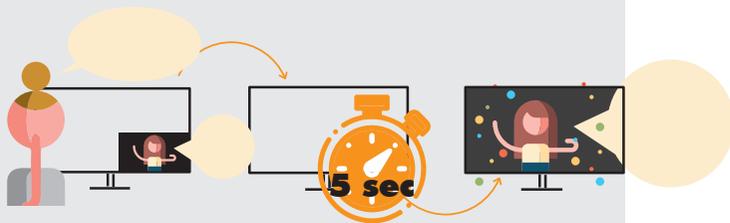
Testing with 'traditional' observing applying theory from Observational research by Jong, A.M. Kanis, H. Rooden, M.J. Vermeeren, APOS (2006, January), observing the reaction of the participant on interaction with the App. Duration is dependent on the context, e.g. the launch event Webinar for which 1 hour is planned.



USER EXPERIENCE OBSERVATION AND INDIVIDUAL INTERVIEWS

The individual interviews will allow the focus on one person and go into depth in their experience while using the App. I can make the interview more personal and tailor the questions to them to follow potentially interesting leads.

The interviews are with members of the innovator group through Teams enabling observation of their interactions with the App through screen share. The interview setting is straightforward: pose the question and let the participant answer. Additionally, the Interview style applied is an adaptation of/based on the laddering principle; the questions are constructive, follow-up on each other and answers are continued by repeatedly asking a why question to get to the core of the answer. This method supports the participant in thinking about the question and explaining their answer better. It also helps them loosen up in the conversation and give full-out answers instead of only 'I like it.'



5-SECOND TEST IMPRESSION test interview I do so through 5-sec tests. This is a method used in UX studies for applications and websites to get insight into users' first impressions, Reddy, V. (2020, August 31). You show material for 5 seconds and let the participant answer some questions about what they have noticed. The test shows what elements of the application screen stand out and are remembered, in other words, what draws their attention and what kind of impression they leave behind. These insights are compared to the designed intention of the feature. For example, the deliverable status is intended to catch the user's attention but is not noticed following from the test outcome, pointing to a potential problem.

Additionally, it is interesting to see how the users interact with the application the first few times. The test provides flexibility for observing their interaction with the App by asking them to navigate to the application page that will be used in the 5-sec test.

Phase 2 intensive use approach

User test 2 is about gaining insight into interaction touch-points of the App with users everyday business work activities, encompassing intensive use.

Research questions 2 and 3 are the focus for this phase. Furthermore, research question 1 reoccurs for comparing the outcome, specifically for expressed expectations of the users for intensive use experience in phase 1.

As proposed in the test set-up document, I use the approach of the next step based on input. Thereto the second user test, also implements resulting leads from insights, participant feedback and personal learnings from doing test 1. Building on the feedback given in phase 1, the combination of adding the application interaction and the emotional blueprint test into the interview is also adapted for phase 2. The first user test functions as a pilot test. Especially considering the emotional blueprint to gauge if the participants are capable of performing in this high-level test. The result of the pilot is that the participant thoroughly enjoyed the test and showed that he was able to complete the study with guidance. Based on this pilot test result, hence all further tests include the emotional blueprint.

The intensive use study contains three parts following the same build-up as phase 1; observing the 'weekly' stand-up SPM meeting, followed by the individual testing including the interviews and App interaction experience observation by use of the emotional blueprinting theory Desmet, P. M. A. (2018). This phase starts with the meeting observation in which the users discuss project progress and interact with the application to update the project's status. The goal is to capture the interaction and application of the App tool in the SPM meeting and interplay between the tool supporting the SPM Methodology execution. The individual tests start with interviews about the user's experience of the application, now that they are familiar with the App and using it intensively. The test includes observing the in-App experience, such as observing the interaction pathways that have started to form. The Emotional blueprint observation is looking into the Apps emotional influence on the user experience journey. In the App, each interaction or element can trigger an emotional response, such as the satisfaction of a green sphere showing the deliverable status. Each of these elements points to something important to the user and provides insight into user experience and potential for designing the new way of working with the App, such as designing for a positive interaction experience. The next page outlines the individual test constructs with more details.

The results of this test phase can contribute to a better understanding of the current way of working with the application. Support in designing for the users needs through the App interaction experience in day-to-day work life to creating the optimal digital user experience. Provide insight into creating a new way of working for the user with the App to implement SPM.



SPM PROGRESS MEETING EVENT OBSERVATION First up will be the live stand-up meeting. This is an official meeting following the SPM method in which the Program manager discusses the deliverable status with their project leaders. For more information hereon, view the guide. I specifically look into what and how the offline and online interactions with the application are during this meeting. Testing with 'traditional' observing means, in this case, observing the reaction of the participant on interaction with the platform.



USER EXPERIENCE OBSERVATION & INTERVIEW The individual interviews follow the same structure as the interview of test phase 1. The interview style I chose is an adaption of/based on the laddering principle; the questions are constructive, follow-up on each other and answers are continued by repeatedly asking a why question to get to the core of the answer. This time the interview focuses more on their daily or regular interaction with the application and how they implement its use into their existing way of working, such as when they use the application and what for. Also, into the relation and effects on the SPM methodology, thus if the application supports the methodology execution and fulfils the users needs here too.



EMOTIONAL BLUEPRINTING INTERACTION EXPERIENCE TEST The blueprint zooms in on the micro emotions they experience while using the App. A single micro emotion does not influence the overall experience. However, each emotion points to something important to the user and can be an entrance point for design optimisation. Relating to the research objective, the App must provide an overall positive experience to the user also, view the quote by Pieter Desmet to the left. The emotional blueprint is incorporated into 1 test. Observing is in the form of an Emotional blueprint; while using the platform to accomplish his/her goal, the participant thinks out loud about the actions he takes and what emotions they evoke. The process is guided by asking several stimulating and supporting questions to help the participant zoom in on what they feel. Overall the test looks into the perceived features and functions of the application, similar to 'traditional' product user testing.

Data collection

This section will go into data collection and the considerations for this research study. Special attention is given to the collaboration with a Jigseye client organisation, A, for user participation and concerning the covid-19 circumstances.

Opportunistic sampling

A quick re-cap; this study is conducted with Jigseyes client A implementing opportunistic sampling. Due to the circumstances, I need to be flexible with resources: working with what is available. Specially arranged for this research is a group of 11 users starting usage ahead of the whole organisation. These are the potential participants for this research.

At the launch event, the App will be introduced to them for the first time. Afterwards, they are contacted for participation in phase 1 initial use. As the baseline for qualifying for participation, they need to have used the App at least once, defined as opening and exploring features. In order to be able to answer the individual testing questions in earnest, they need to have a feeling for the user experience.

Phase 2 is initiated 1 to 2 months after concluding phase 1, allowing users to familiarise themselves with the App tool. Also considering the bridging over summer holiday in which the App will not be used, moreover below. Similar to phase 1, phase 2 participants qualify if they meet the requirement of having used the application, defined as having used the SPM App multiple times for actions related to the SPM methodology. For example, considering inputting and updating project progress actions. This is necessary to have an in-depth understanding of the user experience to be capable of answering the interview questions and participating in the emotional blueprint.

Combing tests

As mentioned in the research phase test introductions, there are 3 test constructs of which the individual participant tests are combined into one test moment. The individual part of the user research, including the interview and interaction observation, are interwoven in the test construct. In other words, while interviewing, observations are being done. For example, facilitating the situation in case the participant wants to demonstrate their point by showing it in the App. Furthermore, the interview transitions from phase 1 into the 5-sec impression test. Overall creating a smooth flow through the tests set-up and keeping it interesting for the participant.

Comprehensive digital research

A positive incidental effect of covid is the new approach taken to research data gathering. The user tests are conducted through the media platform Teams that facilitate online meetings. One of the features is 'screen share', through which a participant can share their screen with all other participating parties allowing them to see what you see. While the participant is using the App on their device, I can look with them through screen share without having to be there looking over their shoulder. It also allows for a smooth transition into the App interaction observation as we will already be online, simply switching between screens. The setting is approaching the realistic and natural situation in which the participant uses the SPM App and thus increases natural behaviour observation. The media also allows recording video and audio material, handily recording all views individually, including screen share, providing a complete video and voice recording for analysis. Having as a benefit that observations of the interaction with the SPM App are captured live as they happen during the interview. Allowing for capturing possibly interesting unexpected behaviour and interaction with the SPM app. (moreover, the benefits of this research collecting data in the guide).

The result of data collection is the recording of the live events, including the launch and SPM meeting. Followed by the individual user research tests are continuously recorded, capturing both the interview and interaction observation tests, consequently, per participant. All data is considered confidential and is treated as such. The recorded raw materials will be analysed according to the related test, moreover in the data analysis approach.

Analysis focus 1: what is the SPM App, build-up, what functions does it contain?

Analysis focus 2: how do the functions relate to the SPM Methodology

Analysis focus 3: overall findings on UX/UI design

Data Analysis

What is qualitative data analysis? It is a process of moving from 'raw' data to interpretation, for which there are various analysis techniques to use. This research will be, for most, based on the Grounded Theory Method (GTM) Developed by Glaser and Strauss (1967) and is widely used in qualitative research. Besides this method, the specialised analysis approach for the individual latest tools such as the emotional blueprint will be maintained.

Following the research approach, there are 2 phases, each divided into an observation event and individual user tests. The data collection and analysis for both phases are similar in approach. I will further specify the method of analysis for the research data.

Observation events

The observation of the launch event and SPM meeting will be analysed by re-telling the observed actions and statements. The first goal is to elicit the general steps taken herein, relating back to unravelling the SPM journey, gaining insight into introducing a new tool and the new way of working with the tools.

Individual tests: interview & interaction observing

Considering the individual user research tests: the individual Interview & interaction observations. As mentioned in the data collection, the individual part of the user research, including the interview and interaction observation, are conducted in one test moment with the participant.

The interview analysis will take into the qualitative approach of the Grounded Theory Method (GTM). Purpose: building up an inductively systematic theory that is based on (i.e., grounded in) the data itself. The approach does not have a strict sequence of steps, instead "... systematic, yet flexible guidelines for collecting and analysing qualitative data..." (Charmaz2006, p.2). The general approach includes transcribing the interviews, followed by coding and mapping of themes. After initial coding of the raw data and the building of a codebook, taking into selective focussed coding. In other words, the selecting and grouping into more abstracted themes and categories. By doing the analysis process during and in between the research user tests, it allows me to go back to the field to strategically collect additional data to fill in the blanks and the weak spots of the emerging theory as described by Tracy (2013, p.202). The codes are mapped out, revealing the overarching themes followed by showing the relation between them. The result is, through the uncovered themes gaining an in-depth understanding of the user's experience and most important factors that contribute hereto.

The 5-second impression observation test is supported through the interview questions, guiding the user through the test. The data collection results in a recording of the interaction experience through observing and answers to the complementary questions. The App screen chosen for the test, the interactions and screen reference are documented. The outcome is visualised, resulting in a heat map of the App screen used for the test in which combining all the impression findings.

The method of Emotional blueprinting by Pieter Desmet is used as a guideline for drawing up the blueprint outcome and the continued analysis hereof. Appendix 6.3 User test guide phase 2 intensive use goes over the general steps used in this analysis process, following as described in the design for emotion guide Desmet, P. M. A. (2019).

raw data to GTM
(transcribing, coding, focused
coding)

organize & highlight

specialized analysis:
heatmap & Blueprint

Research outcome

Here is a quick overview of overall research outcome implications, considering the participating groups for each test and research return.

Respondents

Overall there are 2 phases, each including an observation event and the individual tests in which combined are the interviews and interaction experience test. There are three different groups; the participants in the launch event, participants in the SPM meeting observation, and the participants for the individual tests consisting of the introduced 11 users. I have no influence on the group size for the meeting observations; it can vary per meeting. Some of which show overlap, as users can participate in multiple tests, such as being present at the launch event and participating in one of the individual test moments. Below a quick overview of the research participant response is discussed.

For phase 1 initial use, two launch events are observed—the first event with the users from A and the second with a new client organisation.

As stated in the research test goals in the Research guide for phase 1, the study aims to observe one launch event. This goal is satisfied with additionally an opportunity to sit in on another launch as well. This gave insight into another point that is of high importance for the SPM App implementation; the difference between an organisation that is familiar with the SPM methodology and usage over the long term versus a new client with no experience. The main difference is that an organisation already familiar with SPM can more easily relate to the App demonstration; they recognise the interaction of the physical tools reflected in the new App. A new organisation does not have this prior experience and therefore needs an extensive explanation of the SPM Methodology, physical tools and SPM App.

Users from all management layers were present at the launch events allowing for capturing the initial response to the SPM App from each user group. The launch event covers a total of 45 minutes of observations per event.

Participation in individual tests

Besides the delay's, there is a limited participant pool to work with as the App will initially only be used by 11 users before it will be taken into use by the whole organisation. Considering the influence of the circumstances and user availability, out of these 11 users, 5 participants were able to join the research for the initial use phase. Overall the test goals as stated in the research guide are satisfied. Continuing into the individual tests (interviewing and 5-second impression interaction observation), collecting findings from five users with different management layer perspectives, e.g. project leader, Program manager and Managing board member. The individual tests cover 1 hour of data collection per participant.

In phase 2 intensive use, two Stand-up SPM meetings have been observed. The group size per meeting differs, consisting of 3 to 8 people. Overall, at least one Program leader and several project leaders present in doing so, attaining the goal of observing at least one SPM methodology meeting on the interaction with the SPM App tool. The events were very different in duration; the first was short and to the point, strictly following SPM methodology protocol leading to only 15 minutes of the meeting, whereas the other observation takes 1 hour.

The response is to the same extent as the initial use phase—a total of 5 users with both returning and new participants with various management layers backgrounds. The same test goals asset for phase 1 apply for this phase, attaining the set test goals for phase 2. The individual tests are generally 1 hour per participant over which data gathering takes place.

The research construct takes on the form of testing for minimal needs, as introduced in previous paragraphs. In summary, four events have been observed, and ten individual tests are conducted, resulting in the collection of over 14 data points touching upon the initial and intensive user experience of the SPM App tool.

The launch event captures the first reaction to the SPM app from users of each management layer background. Furthermore, allowing for comparison between client organisations. Overall, in the individual tests, eight different users participated in the user experience testing, resulting in data collection from various users management perspectives and roles in the SPM Methodology.

Additionally, with returning participants in phase 2, the change in experience compared to their response in phase 1 can be observed and evaluated by asking them to reflect on their previous experience.

User-research experience

one of the aims of implementing the 5-second test and emotional blueprint approach into the user research is to support the user in thinking about their experience from a new and fresh perspective. This stimulates to help them reflect and realise aspects that they would usually not have thought about. Furthermore, using a different approach to user research is refreshing and fun to do for the participants, making the research experience interesting for them as well (besides the standard interviewing). At the end of each test, participants are questioned about their experience of this research. Both to find points for optimising the research construct and personal growth to improve my skills as a researcher.

Overall the study, the users responded positively to the test experience. For example, remarking that they found the tools a fun experience and stimulating them in viewing the App in a way they had not yet explored. The participants showed interest in the research tools and were excited to participate in them and know more about them. They were very engaged in the research and testing, making time and thinking through their responses to the tests. Especially the emotional blueprint got attention as it was unfamiliar to the participants, but they all found it exhilarating and supporting them to reflect and think on their user experience.

Furthermore, the possibility of demonstrating their point by showing it using the SPM App added value to the research for them as it made explaining easier. Overall, interacting with the App during the research using screen share for a live showing proved highly valuable both for the user as the research in observing their interaction experience. Central in their response is their content and satisfaction with someone being willing and taking the time to listen to them and their needs. They all responded to be highly willing to be involved in follow up research initiatives. In summary, the participants found the research experience highly enjoyable, interesting and stimulating. Fulfilling my goal of creating a positive research experience for the participant.

Overall note on participant performance on app interaction

According to Jigseye, based on their experience working with A, note on the interaction with SPM by A, that the users relatively closely follow the SPM methodology compared to other clients.

To the research outcome, this means that the findings portray a relatively optimistic view.

Findings Limitations

The following pages will go into the research findings and outcome. The research is extensive and collecting in-depth information on user experience.

Highlighting six research findings

The findings of all six different tests are looked at from various perspectives, including a comparison of findings between the test phases in the data analysis. These lead to the appendix 7 and 8 user research findings phase 1 and 2, respectively, including over 100 pages of data collection and analysis. There are too many findings to all discuss in this report. Therefore for each test, this report will highlight one of the insights found herein. In the overview, six insights will be discussed in the research outcome. The complete overview of insights of both phases can be found in appendix 7.5 and 8.5, respectively.

Limitations and proposal for continued research

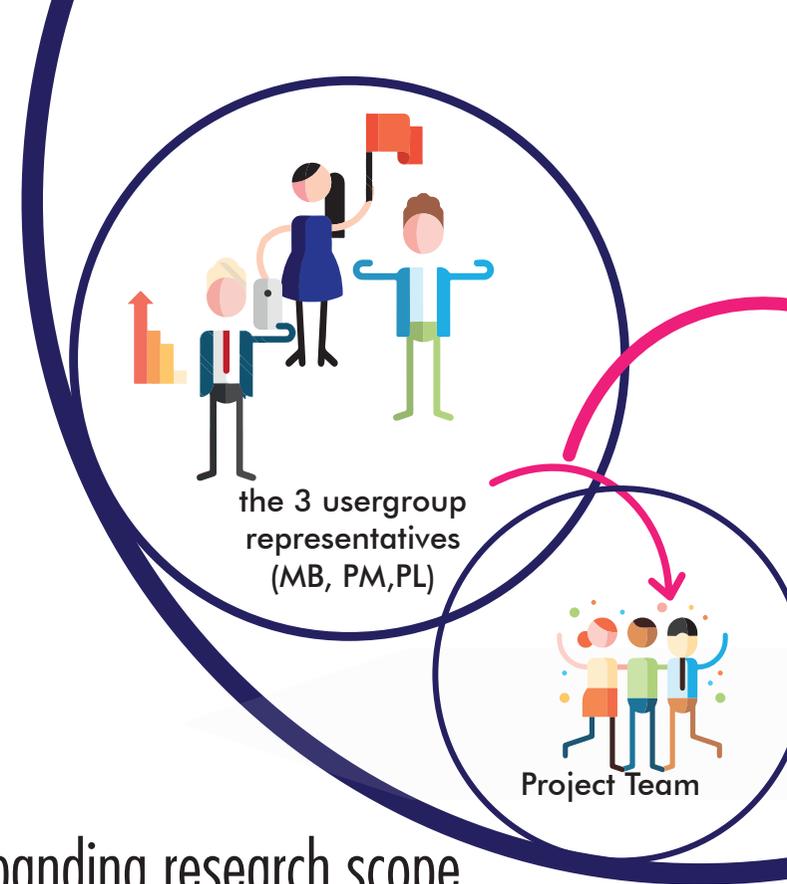
There is always an opportunity for improvement, Considering the large size of this research, including six different tests. Furthermore, this study cannot encompass every aspect to investigate for the SPM app user experience. Especially since the tool is new and this is the first user research conducted with it. As mentioned before, there are many first times for this research and unexplored area's to uncover. No previous material on the SPM App features or users is available for comparison, making this research unique. It can function as the basis of new studies into the SPM tools for continued user search efforts.

A significant contribution to improving and learning from this is experience is through reflection. In Appendix 7.5 and 8.5 included is a personal reflection on my experience of conducting this research. The aspects mentioned herein refer to some of the limitations encountered in this research. Critically looking at the research and my performance resulted in the finalised list of limitations based on proposals for continued research directions reformulated. Appendix 7.5 and 8.5 contains the complete list of limitations and the hereon continuing points for continued research efforts. Here mentioned are the two most prominent points.

First, with the limitation of representativeness. Because of the small research scope within one client organisation, including the truthfulness of the findings for generalizability and validity. It leads to the proposal for continued analysis for comparative research, expanding the user research to include other client organisations. The cross-check analysis takes upon this point. It aims to evaluate the recurrence of the findings in other organisations to generalise and validate these research findings, which will be discussed further at the end of this chapter.

The second is the consideration of time limitations. Qualitative research is a time-intensive process, taking into several directions such as the time available for collection and analysis, such as participant preparation for the interaction tests performance. The proposal extends the research, separating the tests allowing focus for each of the test objectives and more time for gathering more extensive data. Supporting herein is the proposal to transfer the interview into a qualitative study. An additional benefit is that a Quantitative study can reach a broad audience gathering more data for reinforcing the generalizability and validity of the findings.

On a final note to limitations is the influence of interpretation of the data analysis. Especially considering the observation of interaction experience, such as in the emotional blueprint, possibly biasing the findings. Furthermore, the truthfulness of the participant responses on their experience can be questioned, for example, from the point of organisational pressure. This research considers all findings as truthful and valid within the context of this study.



Expanding research scope



Time intensity VS data collection

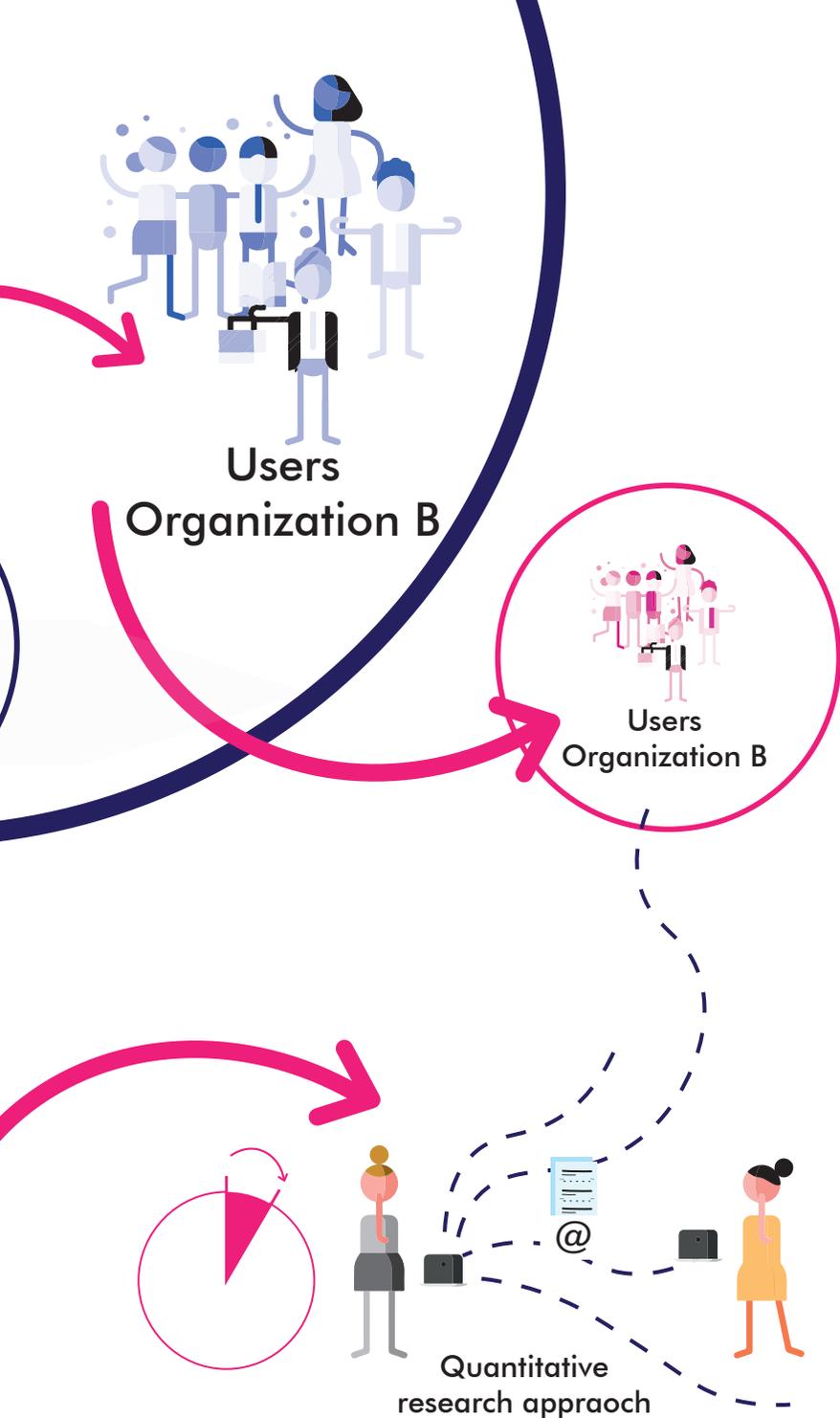


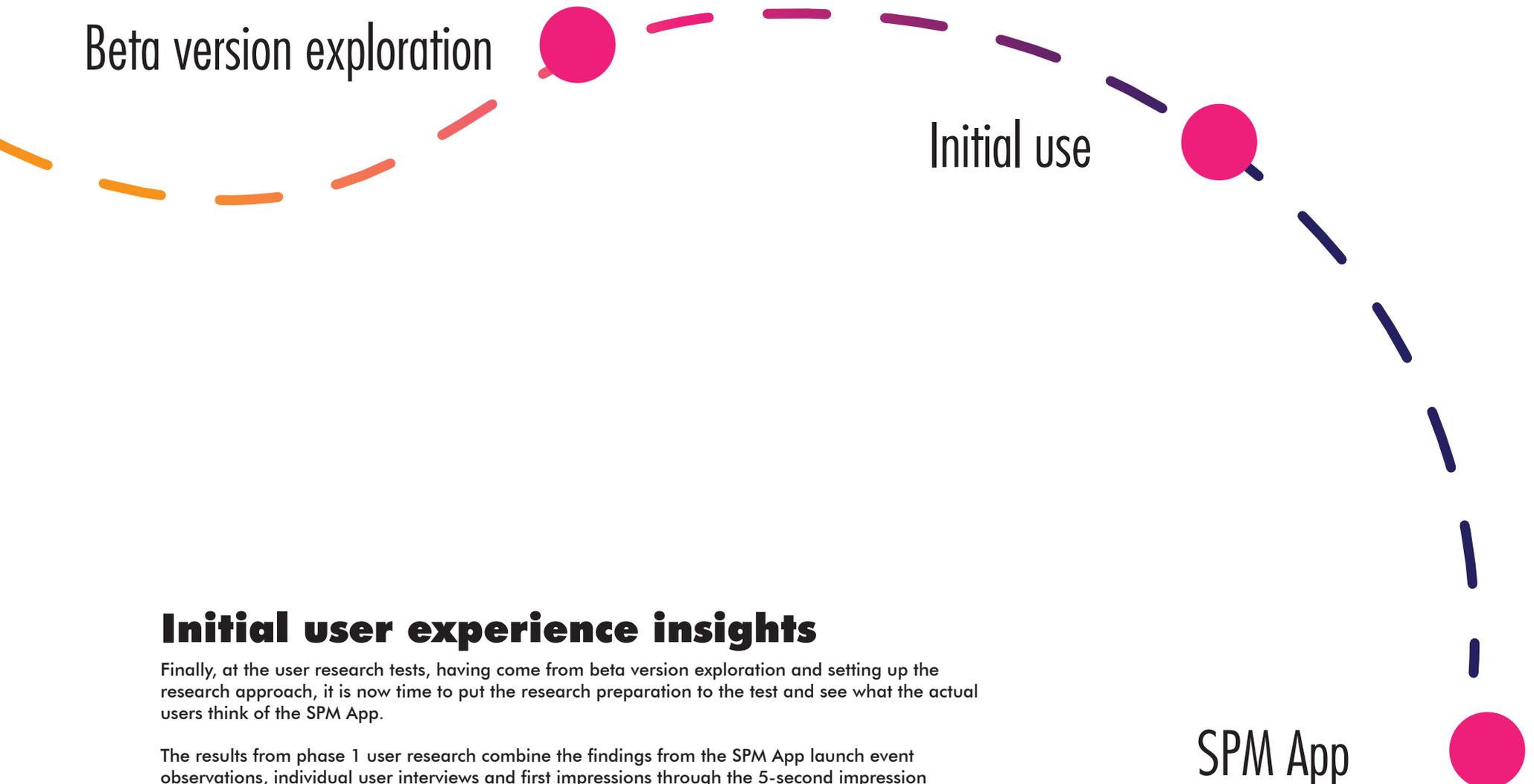
Figure 12 | Take away top to bottom, Left side: limitation/problem of limited user group participants and time intensive research limiting broad data collection. right proposal for expanding scope and research approach.

LIMITATION. SELECT DATA COLLECTION WITHIN ONE ORGANISATION. Considering the limited scope for gather insight on user experience from a small group of users. A limited number of users was available to start. As explained in the guide, only the innovator group is open to testing for this first phase. However, this is further limited by the users who cannot test because they are on holiday, too busy with work, have not yet used the application, and have not used the App because their project is not started nor online yet. All these conditions seriously narrow the resources for this initial phase. Furthermore, it would be beneficial to have more users from different management layers for a better representation of that layer about the composition of the participant group. However, keeping in mind that, for example, the Managing Board is a much smaller group than the Project leaders and thus limiting in potential respondents. It is also taking into account that I still work with the innovator group, first users ahead of the whole organisation, giving me access to limited users and resources.

PROPOSAL 1. TESTING WITH A LARGER, MORE VARIED GROUP. A reoccurring limitation is that you can always test with more users and, in this case, also from varied management layers. Additionally, it might be interesting to include the project teams in the subsequent research. The findings point out that the project leaders desire to include them in the application. These findings could provide insight into the expectations of a whole new target group and their view towards the application and particularly how this change would affect them. Overall it would be beneficial to extend this research to outside A to other clients of Jigseye that will be using the application to collect more varied data. Each company has its own way of working and users with their needs. I expect that the findings can vary significantly between businesses such as a business like A or B (another client). I recommend focusing on phase 2 intensive use—comparison analysis between client organisations into generalizability and validation of findings within the current researched group. The cross-check analysis takes a quick study into the generalizability and validation of the found insights at the end of this chapter. This analysis can function as an initial extension on the research and example for continued research efforts; however, this is still a limited extension, proposal to go to multiple other clients with the same test construct.

TIME LIMITATIONS, there is only a specific time frame to do the user testing in. First, for the sake of the research, the tests of phase 1 have to initiate as soon as possible to capture the first impression experience. The user test is designed for initial use, taking place within the timeframe in which the user has used the application between 1 and 5 times. More would indicate that they are already using the application intensively and thus passed the point of their first impression, which could negatively influence the findings. These tests are not intended for that higher level of experience with the application. Considering the project planning, only a specific timeframe is reserved for testing to leave enough time for the next phase. Other time limitations include the availability of the participants within these time frames, the time they can spend on the test/meeting and the time I can spend on the analysis and preparation of the research. Overall, time and resources are limiting in finding every potentially interesting insight, adapting the strategy of minimal needs to satisfy minimal research goals for going into design, as explained in the guides.

PROPOSAL 2 TRANSLATING THE INTERVIEW INTO A SURVEY. Gather more data through a survey about the initial user experience from the whole company. Building on point 1, the interview questions can easily be transformed into a survey that can be used in a Qualitative study into the initial use of the App, sending it out to the entire company. I advise using a 5 point Likert scale set-up, with additional statements based on the findings from phase 1 initial use as a control to find out if a majority aligns to the findings of this research or has very different experiences. Either proving their value to the design or directing to new design leads.



Beta version exploration

Initial use

SPM App
Launch event

Initial user experience insights

Finally, at the user research tests, having come from beta version exploration and setting up the research approach, it is now time to put the research preparation to the test and see what the actual users think of the SPM App.

The results from phase 1 user research combine the findings from the SPM App launch event observations, individual user interviews and first impressions through the 5-second impression interaction test.

The overall research is pervasive, yielding many interesting outcomes. From the data analysis, there are too many exciting findings to state; they are discussed in the individual paragraphs of the data analysis in appendix 7.2-4 and 8.2-4.

The aspects mentioned here focus on findings of the user's first impression of the application. Summarised the overarching insights that I find most notable from phase 1 initial use.

This report will highlight the most important user study outcomes from the initial user experience phase. In-depth research and the raw data analysis leading up to these results can be found in the process report 7 and 8 user research outcomes.



SPM App implementation for users client organization

SPM App launch event observation

The first findings result from the observation of the launch event of the SPM tool. The findings look at the event as both an addition to the Jigseye process and user experience. Important herein is whether the launch event is satisfactory in conveying the SPM app usage in order for the user to start initial use of the tool.

On its own, this step is a new addition to the Jigseye journey. This is the first ever launch of the SPM App. According to Jigseye, the event takes after their approach for introducing the physical tools implementing a presentation to the user to demonstrate its interaction and usage. Specific to this observed event is the circumstances of Covid-19. The current situation does not allow a live meeting. Therefore this launch event is fully digital through Teams. It benefits to the digital demonstration of the SPM app functions and interaction, being directly shown using screen share. To the user, this gives the experience as if they were the ones interacting with the App on their laptops. Also, this allowed them to better view the App on their screens. For design optimisation, it is attractive analysing for further improving the user's first impression of the application. Specifically looking into the implementation of the application in the whole organisation. There is always room for improvement, as shown in the analysis findings in Appendix 7.5 and 8.5 insights, limitations and reflection.

A point of attention is that the application is implemented in 2 stages; at this point only introduced to the innovator group through an exclusive Webinar demonstration. As of yet, there is no design nor information available on how the introduction to the whole user group will take place—referring to the implementation of the SPM app into the whole organisation.

First impression: positive and intuitive use

Considering the overall impression and reaction of the users on the launch and initial use of the application, their first impression of the application is positive. The users' questions to the introduction event aimed to understand the tool more and expressing their content with the capabilities of the digital App. A fun addition is the enthusiastic reaction of the user to words being part of the research and being allowed to be the first to use this tool. This insinuates that the current approach to the launch event and implementation of the application successfully achieves a positive first impression and initial user experience.

Individual interviews follow up the launch event. Before going into the interview findings, the research outcome will go into the uncovered influence of covid on business and SPM as found through the interviews with the user. This is important for getting a grip on the user's context in which they act. Furthermore, this will function as a basis for comprehending the findings from the initial user experience with the new SPM App tool.

The next page will introduce the current situation, herein briefly touching upon the experience with the currently implemented physical SPM tools and focussing on describing the SPM and business change in the context of Covid-19.

Figure 12 | App launch event
online Teams meeting

Framework

Influence of Covid on business & SPM

A unique aspect of this research is the opportunity to see how the 2020 Covid situation in the Netherlands and the recent lock-down influence business and SPM execution. This factor briefly came up in the interviews. The user's response to the questions relating to the current way of working is paramount in illuminating to understand and empathise with their experience in this situation context. Here the circumstances are described, followed by the relation of the covid influence on their way of working and motivation towards the SPM App.

The new situation: working from home

In covid-19 times, everyone at A was sent home and had to work from home ever since. During the first lock-down, there was no one at the office except some of the managing board members. the sudden change in work environment and need to adapt to a new way of working from home caused asscive stress with health problems such as burnout as result. As managing board member explains "Wat je nu ziet is dat op het moment dat die fysiek aanwezig is en dat je hier fysiek aanwezig ben en de meetings gepland staan die staan keurig netjes elke week geplanned. Dan is er bepaalde push voor mensen, om toch deadlines te halen, heel concreet te woorden maar op het moment dat jij het moment verliest om naar die muur toe te gaan, wat we een beetje in die corona hebben, omdat iedereen vanuit huis moest werken. Dan zie je dat die discipline, die je heel graag zou willen hebben, (dat mensen dat vanuit zichzelf zouden hebben) dat die heel langzaam verwatert . . . Ja die fysieke meetings waren er niet meer en dan is het heel lastig als je dat bord niet voor je hebt en je kon dan wel, met die I-phone, even zien van waar sta je, maar dat is geen ideale situatie. . . '

Out of reach, out of mind

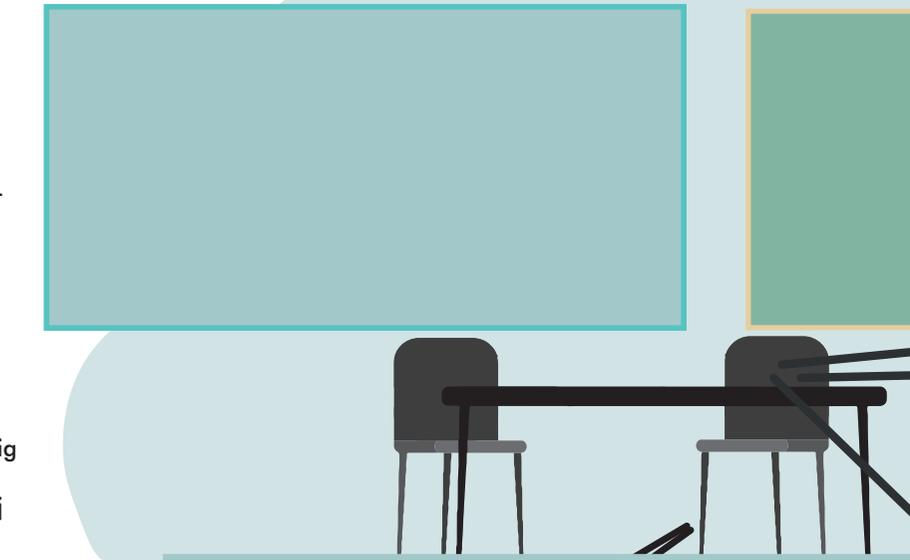
Because the employees were no longer at the office, they did no longer go to the 5th floor to view the SPM wall. They no longer had an overview on the projects planning boards nor the SPM wall with the deliverable planning anymore.

as project leader described (P2) 'Merken wel heel erg, op het moment dat corona begon mensen allemaal thuis gingen werken die hele muur werd vergeten. Het project gingen wel door de vaart ging eruit de structuur ging eruit en dat raak je kwijt. '

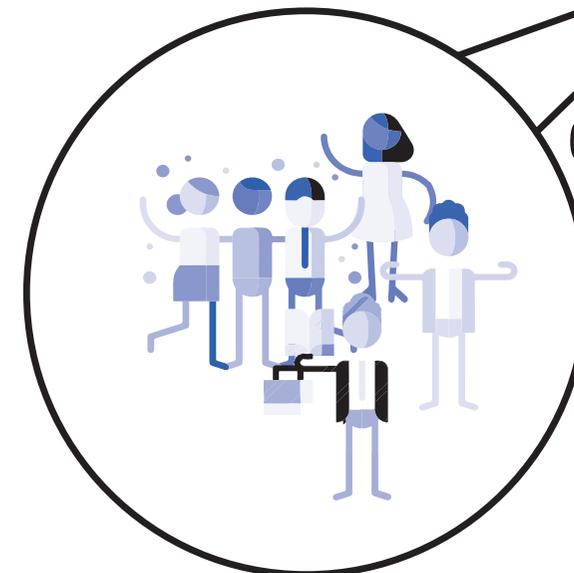
Furthermore, because of the sudden impact of the Covid- crisis, people got overloaded with their work. Resulting in stand-up meetings being cancelled; Project team members started to get far behind their lanning, miss deadlines and not update their deliverables.

The effect on SPM

The effect is that deliverables and projects where no longer up-to-date as observed a project leader, she gave the example of hearing a lot from colleagues around her 'Dat ze niet denken he jongens het is corona ik kom niet meer in Duiven dus dat project laat maar effe lopen . . .' Another Project leader argues that they did try to re-coonect to the physical tools however as he explains 'kijk als je die mijlpalen samen niet op een bord hebt staan dan wordt het natuurlijk onhandig met camera's en zo, '. These attempts failed because it was not feasible or very clumsy, resulting in either way still not having a clear picture of SPM Progress. There was no overview on the progress of the project, with as ultimate effect that bottlenecks were left undiscovered, piled-up and heavily delayed projects. It is negatively affecting project execution efforts. In turn, it is reflected in the hindrance and delay of SPM strategy transition.



SPM Tools are out of reach



Covid-19 lockdown:
The users can not go to the office

Metro-view

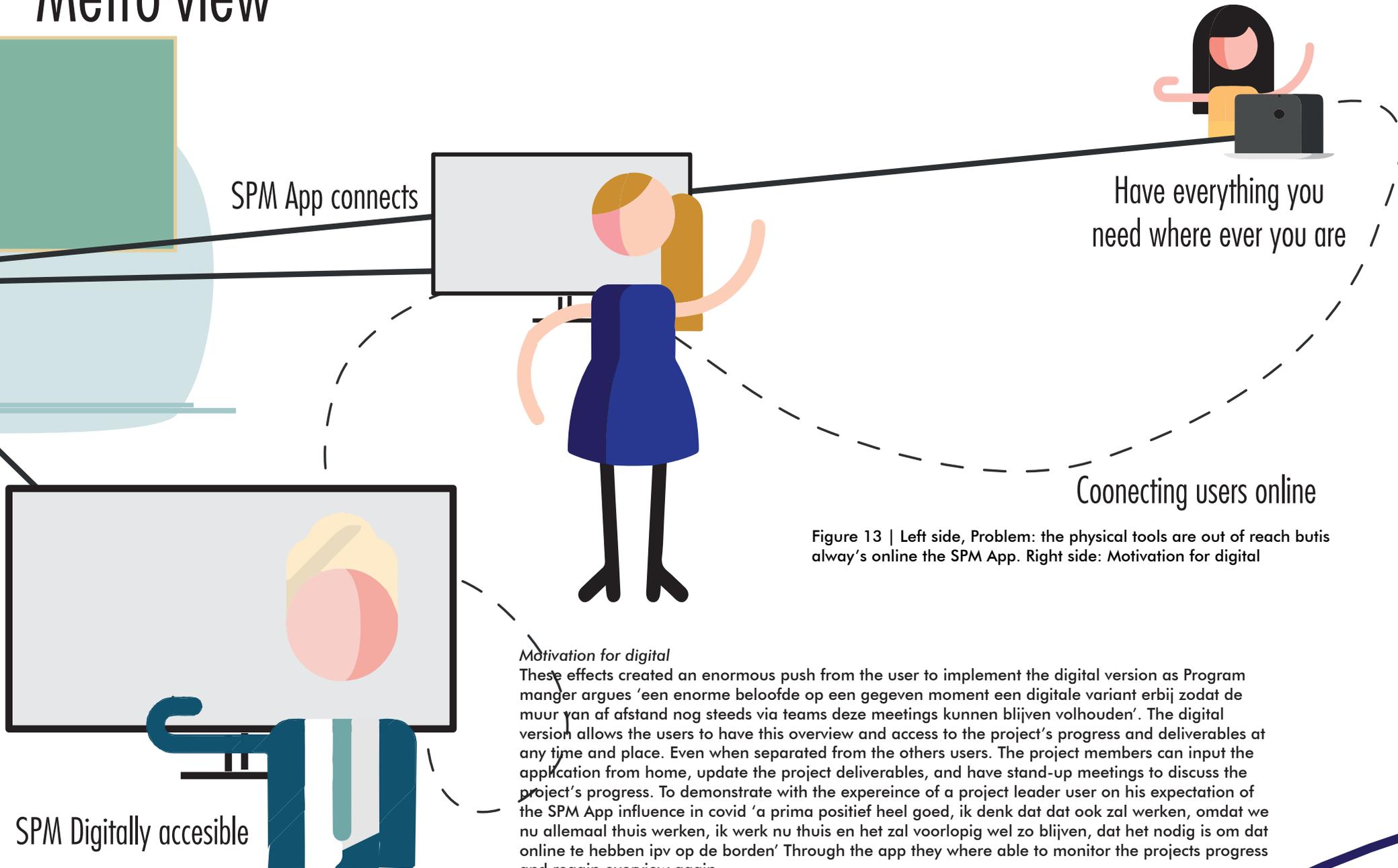


Figure 13 | Left side, Problem: the physical tools are out of reach but is always online the SPM App. Right side: Motivation for digital

Motivation for digital

These effects created an enormous push from the user to implement the digital version as Program manager argues 'een enorme belofde op een gegeven moment een digitale variant erbij zodat de muur van af afstand nog steeds via teams deze meetings kunnen blijven volhouden'. The digital version allows the users to have this overview and access to the project's progress and deliverables at any time and place. Even when separated from the others users. The project members can input the application from home, update the project deliverables, and have stand-up meetings to discuss the project's progress. To demonstrate with the experience of a project leader user on his expectation of the SPM App influence in covid 'a prima positief heel goed, ik denk dat dat ook zal werken, omdat we nu allemaal thuis werken, ik werk nu thuis en het zal voorlopig wel zo blijven, dat het nodig is om dat online te hebben ipv op de borden' Through the app they were able to monitor the projects progress and regain overview again.

SPM App individual (initial) user experience

Going into the individual tests containing the interviews and interaction experience observation through the 5-second impression test. This paragraph combines the findings of the individual tests leading to the overarching themes of phase 1 initial use.

After collecting the raw data and transcribing and coding analysis, eliciting and mapping out the generalised outcome themes, resulting in an overview of findings bigger than A0. As mentioned before, the research outcome focuses on the overarching themes found from the individual testing. This paragraph continues on the findings of the previous page on the current user situation sketch. Taking into the perspective of the initial use with the SPM App tool.

Highlighted are 3 of the most interesting findings from the individual tests. First, emphasising the positive and intuitive first impression of the SPM app, followed by the need for more functionality and the rising desire for the App to have a broader purpose towards communicating and sharing strategic information with the whole organisation.

Intuitive first use

The webinar introduction is sufficient instruction for using the application, as users agreed in the feedback to find it looking 'intuitive' to interact.

On the right is a visualisation introducing the users of the SPM app with a quotation on their initial user experience with the new tool. As can be seen, these are diverse, differently oriented, yet ordinary people whom all expressed to have a positive experience with the App tool. such as Managing board member argues (P2) 'Ik heb ook niet heel lang uitleg gehad, was niet nodig spreekt redelijk voor zich.' This outcome supports the intention that the SPM tool is intuitive to use and easy to get started with SPM execution.

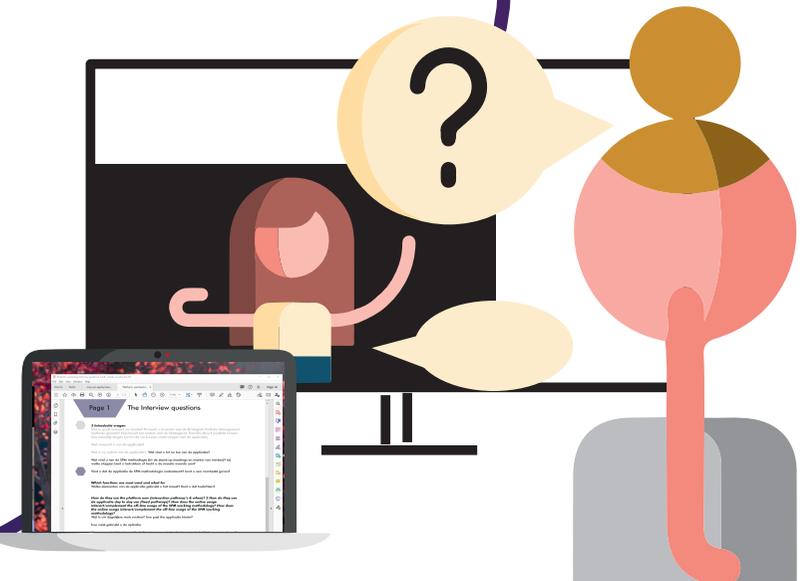
Later in the individual interviews, this was further confirmed the uses as they replied not to have needed to use the guide for the SPM app since the launch; they found it easy to use. Fun fact: Especially for the application, a guide was developed (for which I helped designing it, view Appendix 3.3 and 3.4 'My first impression') with an explanation about the app features. However, participants did not use The Guide at all, not even opened the email about it, because they find the app' easy to use. Furthermore, the Webinar is experienced as a sufficient illustration of the Apps feature interaction to start using it themselves.

Higher management is very optimistic and enthusiastic about the application. They expect the application to be implemented smoothly and perfectly used by everyone, providing input about the projects progress and deliverable status easily and ontime. A program manager argues that (P1) 'Ik denk dat hij overzichtelijker en ook veel sneller tenminste makkelijker toegankelijk is... maar ook veel sneller toegankelijk gaat worden'

They expect that if everyone uses the app accordingly, the app will provide them with overview at any time anywhere and support the Program managers to spot bottlenecks early on so they can be fixed in an early stage. As a project leader stated in confirmation '(P4)Het management kan dan ook snel een overzicht krijgen hoeveel projecten hebben nog issues waar moet ik nog iets aan doen. (metroview) Volgens mij kunnen we straks ook zeggen dat er een is en dan benoemen wat dat knelpunt is.'

All interviewed users found the application' easy to use and already showed they know their way around the App. Primarily, the term intuitive and easy reoccured throughout the interviews and interaction observations 'Het werkt gewoon erg makkelijk, sorry dat ik het blijf herhalen maar het is gewoon zo' as sated by a Managing board user. Surprisingly all the participants, from all management layers, regardless of having opened the application before the interviews, showed through the 5-second interaction observation test that they could easily find their project and navigate through the application.

The users



The app is more than a tool

from the interviews was found that the application is seen as more than just a tool for SPM. The users, especially the Managing board and program leaders, envision using the application for broader uses. In general, they want to include the whole organisation more in the company's strategy. They believe the App can be the bridge between higher management and the rest of the organisation.

Especially important is highlighting the accessibility of digital SPM and that this new tool is creating a low threshold for interaction with SPM as commented by a Managing board user: 'dat via deze digitale OBA-wall, dat het een ding gaat worden van ons allemaal. Ook als je toevallig geen project aan het runnen bent... Zeg maar de drempel wordt zeg maar naar beneden getrokken om te zien waar wij als organisatie mee bezig zijn; dus voor ons werkt het enorm drempel verlagend, om veel meer mensen in de organisatie mee te krijgen in het geheel.'. Central herein are two factors. First that the SPM physical tools are currently only accessible for higher management including the managing board and program leaders, literally being kept on a separate floor and behind a locked door. Second the influence of covid-19 lock-down on the accessibility to the physical tools, moreover in the next paragraph.

For example, as a communication platform to the rest of the company to inform them about what the organisation is currently working on and towards in the strategy execution.

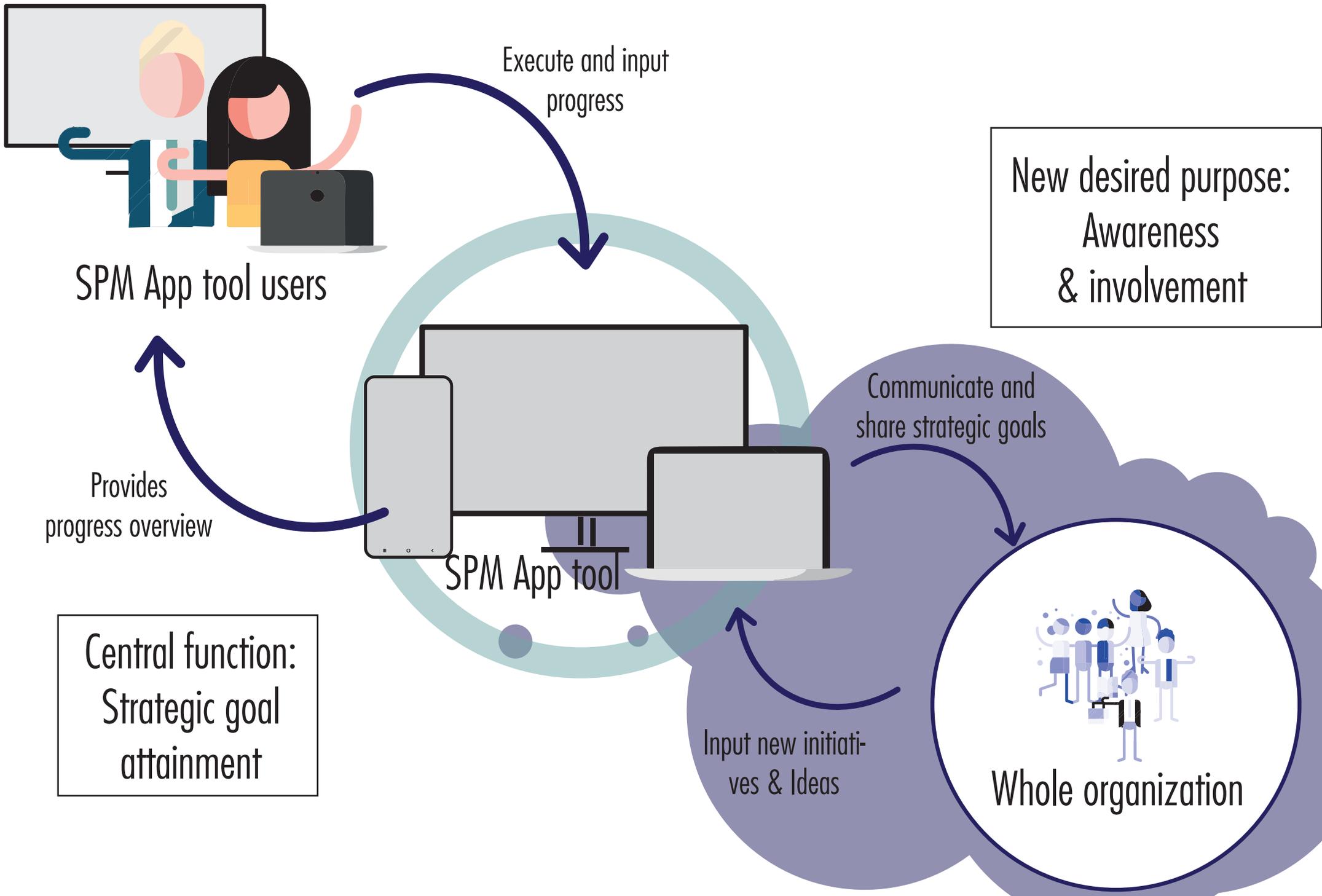
Also, as a means to share towards everyone the accomplishments and triumphs of its employees, such as putting a spotlight on projects that were successfully finished. Giving them extra attention as a reward to their effort and completion of the project.

Additionally, they desire the application to function as to facilitate and support the employees in supplying ideas for potential future projects as argued by program leader user that 'gezamenlijk bezig zijn om hier projecten op te krijgen die, gewoon echt bijdragen aan de ontwikkeling van de onderneming en mee werken aan de transitie van de merken.'. It should be possible for anyone working there, even the janitor, to easily supply the app with their idea.

In summary: The App desired to become more than just the SPM App tool digitalisation. The users envision using the App to communicate with the entire company on strategic initiatives, involve and stimulate the organisation in bottom-up idea supply, and spotlight projects that share and celebrate success.

Desire/need
of the client organization
for Purpose & function
the SPM





The need for more functionality supporting interaction

Continuing on the line of thought of the previous finding is the outcome of a strong desire for more, taking into the need for extra functionality of the SPM App features. This finding strongly came forward in the 5-second test interaction observations supported by the interview questioning to elicit the underlying needs.

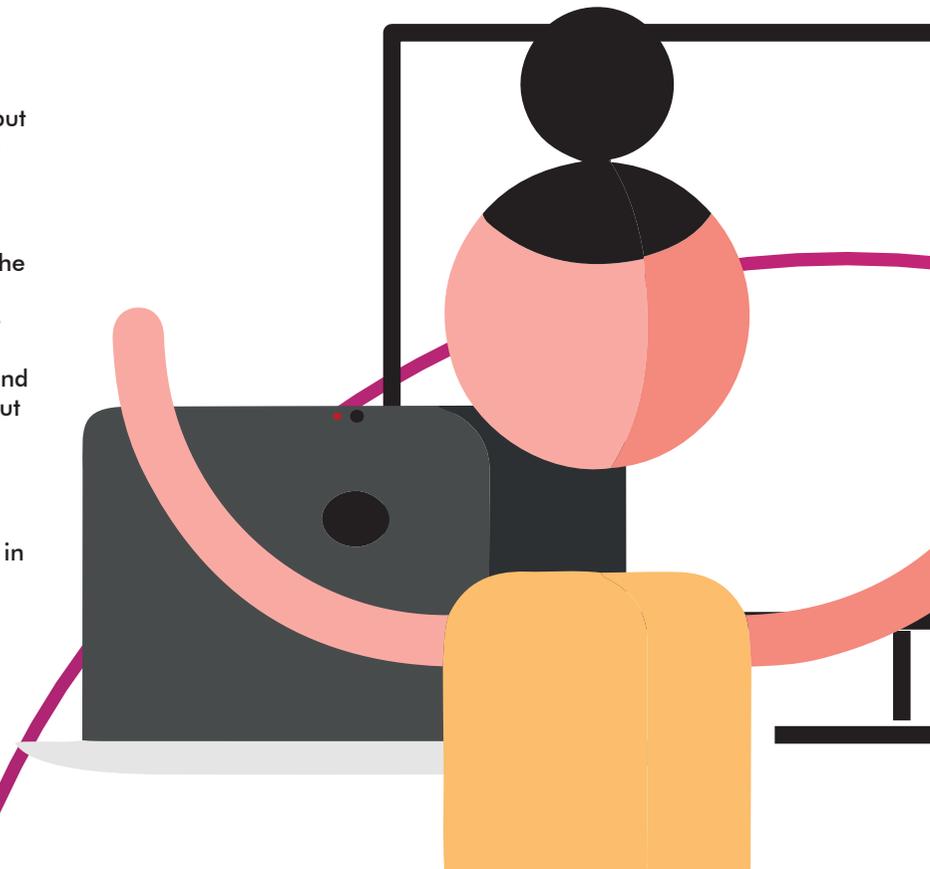
Overall, the participants desire more functionality from the application. This is seen through several points that come forward; here, a few examples are mentioned to demonstrate the importance of this finding to the user's interaction experience. Additionally, since they are used to certain features from other App's they already use, they expect them in this App as well.

One of these is a function for waiting ideas. Currently the application only facilitates for ideas that have been approved by the board. They desire to input ideas starting from an earlier stage into the application as not to have a separate log for them and have a more complete overview of what they are currently working on. As a Program leader user argues ". . . ons punt is ook zo, dat er weinig input vanuit de organisatie betreft nieuwe ideeën . . En we proberen eigenlijk door zichtbaarder te maken dat mensen denken; 'he dat dit een bepaald thema is, of een bepaald programma, daar kan ik nog wel ideeën over, dan maak je het laagdrempeliger voor mensen om ideeën erover te ventileren'.

Also, a desire from the project leaders is to include their teams more in the application, such as for the deliverable planning for which they work on the deliverables. This is stimulated from the reservation towards having double work in communicating the project's progress to both the application and the team. To explain further, the project leaders are hesitant about double work toward project teams management and planning. The project leaders already use other programs like Microsoft projects and teams to manage their projects progress and communicate this to their team. They are reserved about using the application, stating that it is double work to report the deliverables to the project leader in the App and have to use another program to communicate with their team, constantly switching.

In summary: the desire for more highlights many desired additional new features to the App under which page for 'waiting' ideas supporting idea inputting (from the whole organisation as mentioned in the previous finding) and expanding the App involved to include project teams in the line of SPM communication.

Individual Interviews



Intensive user experience insights

Continuing on the research results about phase 2, taking a closer look at intensive use. This research was conducted about a month after the initial use phase research, ensuring that the users have had enough time to use the SPM App in their day-to-day- work-life routine.

Here are the insights focussing on the highlights from observing an SPM meeting, individual interviews and emotional blueprint analysis.

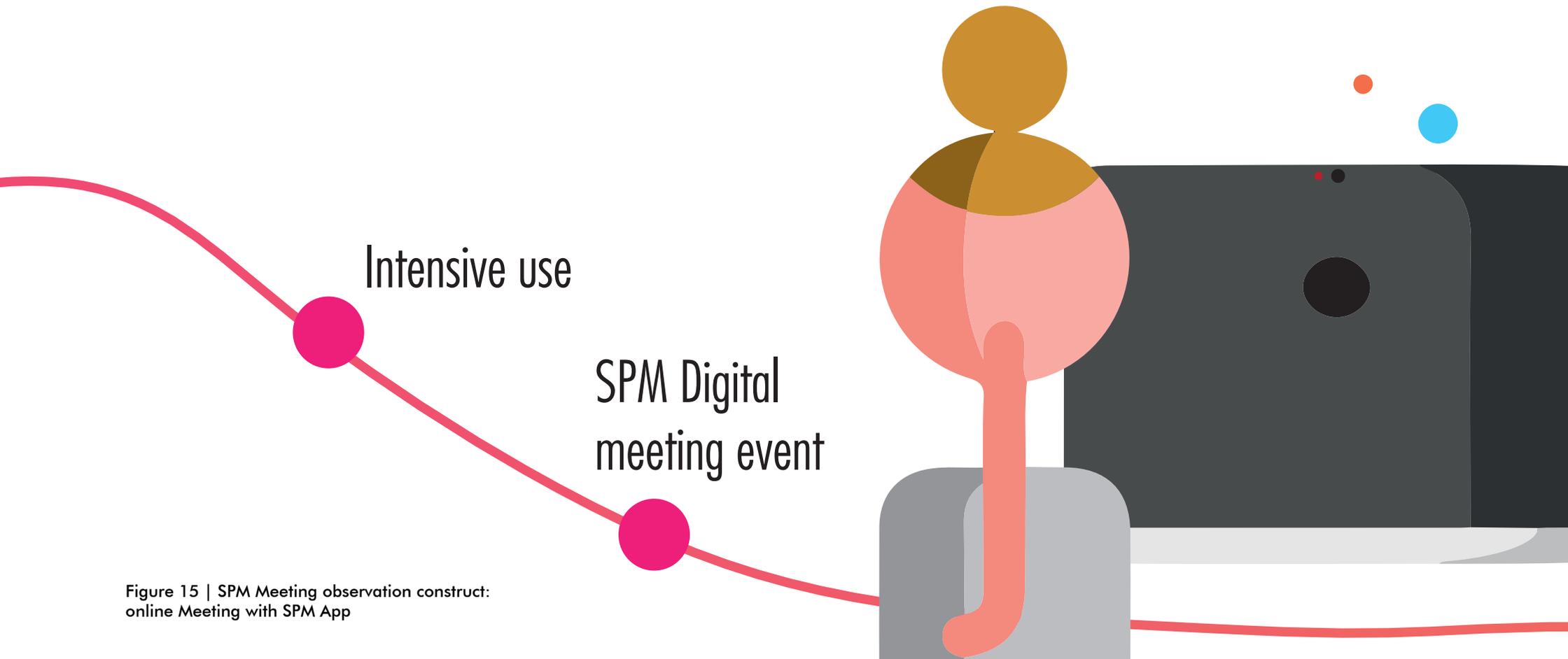
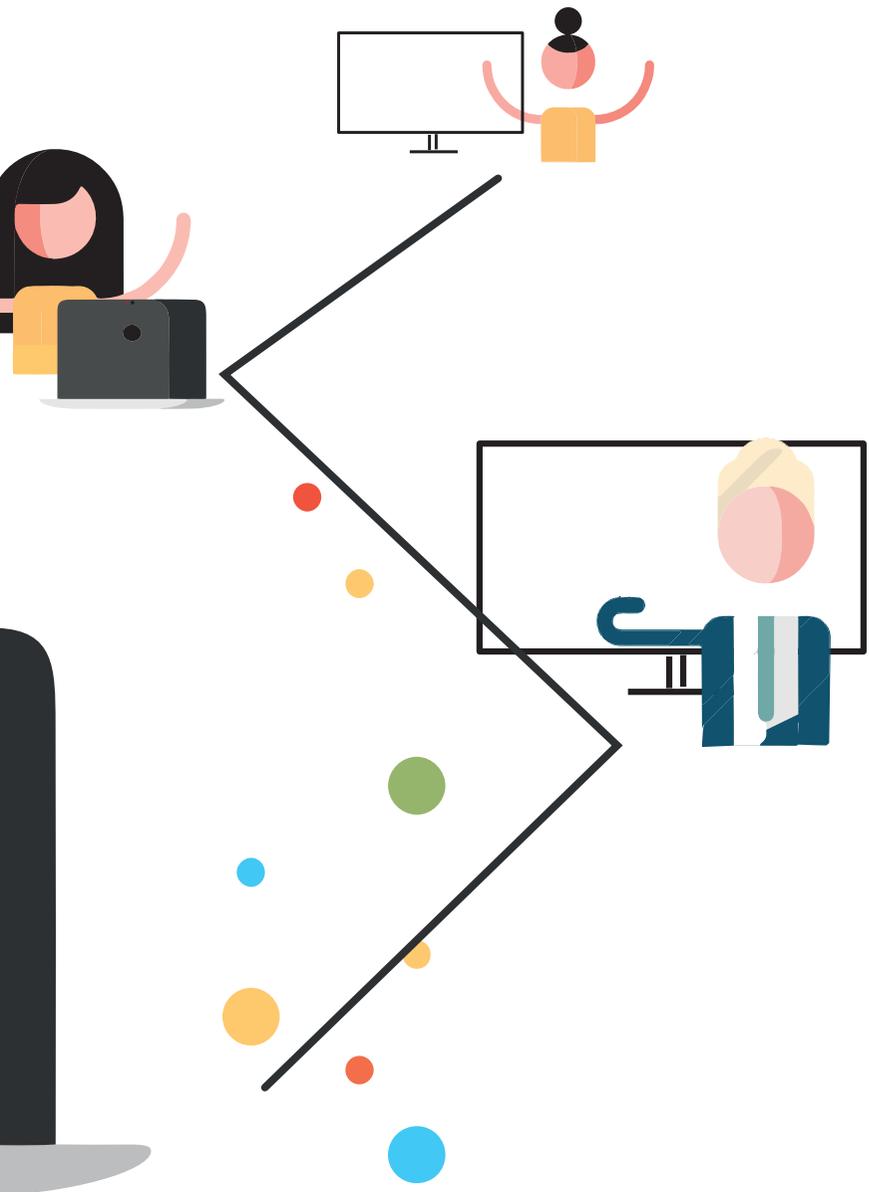


Figure 15 | SPM Meeting observation construct: online Meeting with SPM App



SPM App meeting observation

Two meetings are observed. Overall, the observations are that both meetings follow the same structure described in the SPM methodology, but they each have their twist to it. There are four aspects worth looking into to get insight into the application's interaction: the meeting style, how the application supports the meeting, and what are vital interactions—for each of the observations, highlighting these aspects.

First, since this was my first SPM meeting observation with no previous experience, this is new ground. A quick introduction into What is this SPM meeting in relation to the SPM methodology? Observed is the stand-up meeting between the Program Manager and Project leaders to share project progress and solve problems or bottlenecks are they are called, and that all in max 5 minutes per person to do their story and go on.

Successful implementation in the meetings

Going digital does not mean that aspects of the physical meeting are lost. Some will be strictly following the SPM methodology, but others are like the quick, fun conversations in the meeting. The Overall finding is that they implemented the application into the existing meeting framework without any additional guidance. There are some kinks to be smoothed out. In general, the current set-up guidelines of the Methodology work sufficiently for implementing the App into the meetings. Added hereto a little creativity and flexibility of the users incorporating the App in the way it supports them in their meeting, resulting in the various approaches as observed.

SPM App individual (intensive) user experience

The individual interviews are centred around uncovering the intensive use experience of the SPM App. To this end, the initial use phase also provided insight into how the user expects the SPM app to use. The interview analysis returns to these aspects as a basis of assumptions to be validated through comparison.

Similar to the phase 1 outcome discussion, combining the findings of the individual tests of phase 2, the interviews and emotional blueprinting resulted in the individual tests' overarching themes. Highlighted are 3 of the most exciting findings form from the intensive use phase. First, coming from the emotional blueprint analysis is the outcome of a lot of little things that influence the user experience with the SPM app; a few examples are given—followed by the finding of a need for transparency and security. The third finding is taking into an overall observation throughout the research discovering the intensive user's group identity.

Before discussing the phase 2 outcome, the phase 2 findings overlap with and confirm the in phase 1 found aspects such as the user's expectations for the SPM App benefits and experience. Through the reoccurring and validation on the earlier findings through phase 2 analysis allows now to state these findings as a research outcome.

A lot of little things

The emotional blueprints show the user's interaction experience over time, plotting out the moments of their interaction journey against a negative or positive experience. An example blueprint from a project leader user experience is shown on the right portraying their user experience as explained in theory; each of these points on the emotional line direct to something important to the user and provide points for design improvement. This is where the findings from a lot of little things that influence the users experience with the app come from. Through the interviews, the user reflected upon their experiences. Allowing to uncover the underlying needs. Here highlighted are a few of the found overarching themes that occurred throughout the blueprints of the participants.

Overall, these data points can contribute to creating a more smooth interaction experience for the user and are therefore essential to include as a design lead.

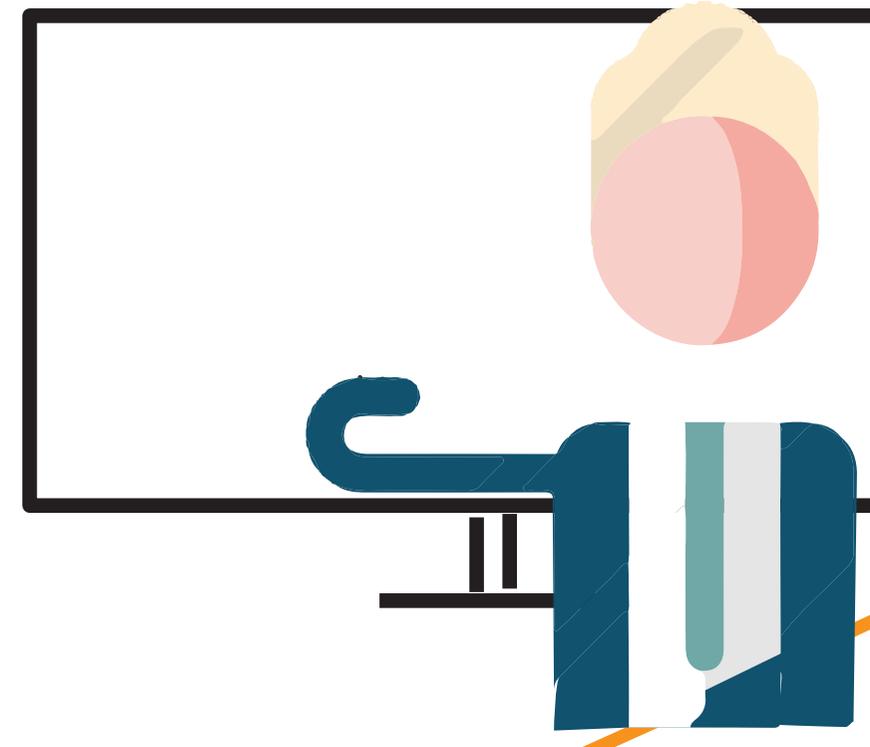
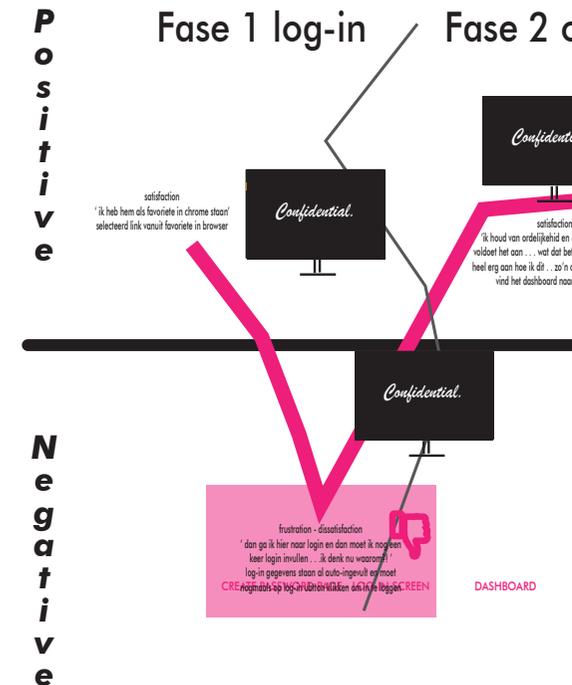
Focus on their own, do not like searching, desire efficiency. They focus on going to their project and specific actions to illustrate that searching through the project list for their project becomes irritating. The users also desire more efficiency and functions. As argued by them, they are used to the everyday conveniences other Apps they use provide them with already. For example, Teams projects such as seeing their project at the top of the project list because the program recognises they are logged in.

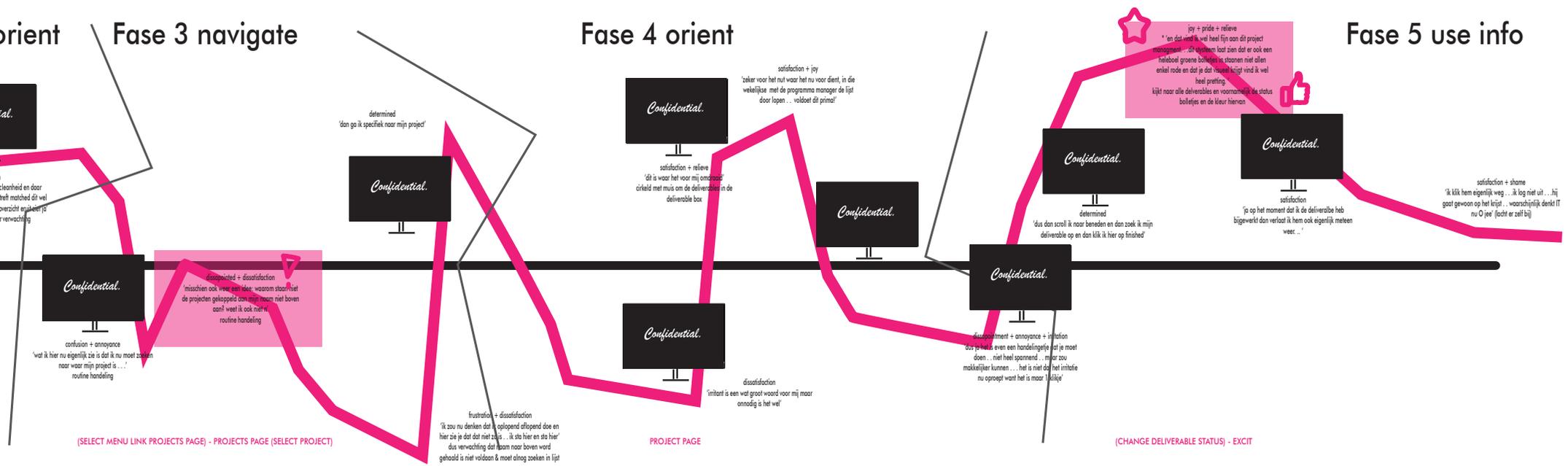
Visually seeing project progress is highly valued Visually seeing project progress is highly valued, not only showing red but especially what goes well & supports in starting the discussion. The following statement by a project leader user demonstrates the strength of visualization in the application, I find this example inspiring and could not word it better: *'. . . en dat vind ik wel heel fijn aan dit project managment, zijn zo vaak geneigd om te kijken naar de dingen die niet goed gaan en dien nog moeten in tegen stelling tot alle stappen die we al wel gedaan hebben en dat we wal wel echt wat voortgang hebben gekregen en dit stysteem laat zien dat er ook een heleboel groene bolletjes in staanen niet allen enkel rode en dat je dat visueel krijgt vind ik wel heel pretting. Ook omdat het direct blood lecht van weten we als organisatie voortgang te houden of niet. pretting dat je kan zien dat dingen welzijn gedaan prettig dat je kan zien waar het viuseel hapert en dat brengt de discusie op gang en dat helpt mij als project leider wel om naar de programma manger te gaan en ja het stat nog steds op oranje dus ja zeg het maar.'

Creatures of habit; comparing to apps they are familiar with/ already use. Negative attributes that are not of the app itself are accounted to the app's experience. An example is logging in; the participants all complained that their details are not auto fill in and therefore have to do it manually. At the same time, this is a setting in the browser you can select to memorise your details which is not part of the app.

Comparing the blueprint outcomes of all the users, looking at the blueprint experience lines, overall more negative than positive experiences. The app should stimulate interaction and inputting for continued use, as Jigseye expresses. Especially the end poses an excellent opportunity for optimisation design. Ending on a high, ultimately, you want to end the use of the app on a positive note. This is a positive experience.

Overall there are a lot of small optimisation points from the blueprints. As explained there, every miro-emotion refers to something important to the users, positive or negative and therefore entry points for understanding & optimisation. This can take several forms, such as strengthening a positive experience or transforming a negative into a positive. For example, the extra 'clicks' needed to find their project in the list or add a document; these can be minimised, making the pathway more direct and focussed.





Into the Emotion Blueprint

Individual Interviews

Transparency and security

Uncertain who puts effort in-app, unclear who changed things, not always up to date. Leading to the three factors of transparency, security & one truth. These are embedded in the distrust in the information shown in the application and, therefore, in the usage itself. This point already came forward in test phase 1, where some users doubted their effort to use the App if it would become double work. Similar effects came forward, resulting from the emotional blueprint comparison. Such as the doubt into who put effort into using the App, missing transparency in who can change things or when and by whom it was changed and seeing not up-to-date information like deliverables whose deadline has already passed or.

As pointed out in the first design lead, providing input to the application is the most important element. If done wrong or not on time, it results in the user's distrust in the app, not putting effort into it and eventually not inputting at all, with; as a result, the app does not work anymore - is no longer showing the truth. As one user experience pointed out in the interaction experience observation the PL rema thathw8 'ook al ben ik geen project manager van dit project kennelijk heb ik de vrijheid om hier dingen te uploaden 'ik denk niet dat dit helemaal de bedoeling is maar dan is het wel belangrijk te laten zien wie de wijzigingen heeft aan gebracht ', which he reflected upon as distrusting the App information. Continued hereon is the statement from him 'nou ik kan mij voorstellen dat je op gegeven moment in discussie komt van zijn dingen nou af hebben we gedaan wat we hebben beloofd . je moet wel ergens een base line hebben . . .'. Similar aspects were raised by the other participants. The SPM App loses all function as no decision can be made based on the app bringing the strategy transition to a halt, impacting the whole company.

It rests upon creating transparency: strengthening the feeling of making it a group effort and having clearness on who does what in the app. Security, through seeing that the information has been saved correctly and cannot be changed by just anyone whilst seeing who can and did. Together with showing one truth, ensuring that the information shown in the app is up-to-date and reflects the current situation so that the right actions can be taken. In summary, the users need the SPM App to provide Transparent, security & One truth.

Figure 15 | Abstracted emotional blueprint analysis of user interaction experience with the SPM App, showing in pink the emotion line and highlights of the experience

The intensive users

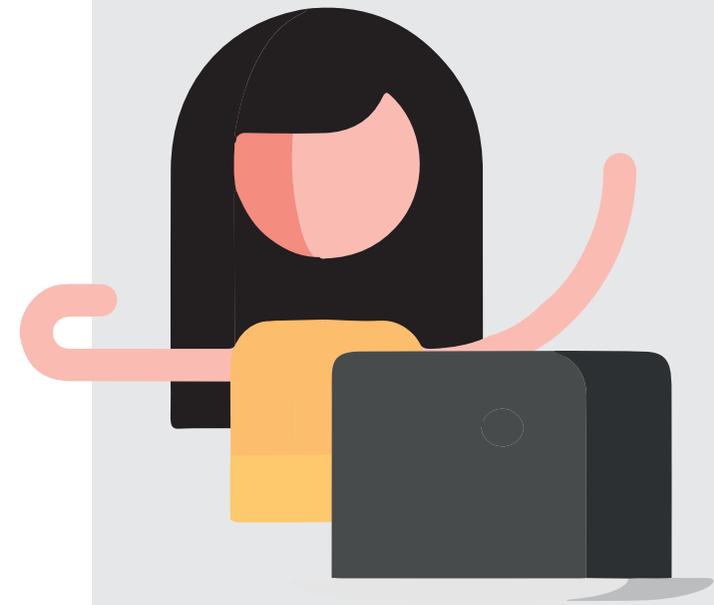
Through both research phases became clear that from the user group consisting of the managing board, program managers project leaders, the most intensive interaction with the App is shown by the program managers and project leaders user groups.

The central goal is achieving that the user puts effort into the project's progress and inputting in the application. This is so that the App can provide an up-to-date overview of the strategic progress for the Managing board. Supporting the decision-making process and a successful strategy transition. Thus this all stands or falls on the project leaders, providing the right and on-time information to the application.

The App is focused initially on providing an overview for the Managing board & Program leaders. However, the actual primary users are the project leaders. They are the largest group of users and leading input providers to the App, using it to do more and more intense. Therefore it is important also to hear their needs. As resulted from test phase 1, they were more reserved about the App and focused on their project execution. The project leaders expect slightly different things from the application, for example, to have for themselves and their project team a deeper, more detailed layer on the deliverable planning for the team.

This is also about lowering the threshold towards contributing to the strategy transition for all users and, as mentioned in test phase 1, not having to go to the 5th floor anymore and making it a thing of and for everyone.

Overall, the App is designed for management to provide an overview, whereas the more extensive & more intensive user group are the project leaders. Furthermore that the project leaders and program managers are the actual intensive users of the SPM App tool, coming from the causal relation that they are the main user group providing the input to the App, and without them supporting the line of input, the SPM overview for the managing board can not be adequately established. Furthermore, continued design should especially look at their needs, facilitating inputting a low as possible threshold to interaction with the SPM tool. Thus leading to the need to shift in focus for designing for the intensive user group.



SPM App users

SPM App users overview



Desire to communicate and share SPM with



Intensive users

Intensive users want to involve in SPM



Figure 16 | The SPM App user groups overview: highlighting the intensive users the Program manager and Project leaders

User research insights overview

The user research yielded many findings, interesting test outcomes and surprising observations of the new SPM App tool in action. Even when summarizing them, they would not fit within one page. Therefore this research report only highlighted the exciting findings for the research goal outcome as discussed on the previous pages. General overarching themes are discovered in taking a closer look at all these insights combined; these are the design leads.

Let us start with a quick overview of the main design leads from both research phases combined, as shown and defined on the right. Herein double's, and similar insights have been combined to form a comprehensive list that can be used to reevaluate the design leads following generalization and validation analysis.

From the 12 defined leading insights (defined combining appendix 7.5 and 8.5 insights), six themes were established, each with the potential for design creation. This design leads each poses a unique quality found from the user research that gives direction for continuation in the design phase for ideation purposes. Taking findings to a higher level of abstraction allows the designer more freedom when coming up with ideas and designing for that direction, allowing after a phase of converging a new start of diverging for developing ideas.

Next is a brief study into the generalization and validation of these design leads through a cross-check analysis. Based on the outcome of this study, from the resulting design leads, concluding the research through a selection on which leads to use for the hereon following design phase.

from research results coming to 12 lead insights. . .

Synthesizing into 6 overarching design lead themes . . .

Each with potential value for design creation.

Desire for more

**A lot of little things:
Smoothing out
the user
experience**

**The app is more
than a app:**

**Positive
user experience**

Shift in focus

**Transparent,
security
& One truth**

The design leads to A DESIRE FOR MORE combines the many desires the users expressed about more functionality and options in the App. It is mainly about expanding the App capabilities so facilitate that users can perform their tasks better. To illustrate with an example, for the framework expanding to showing updates and changes made over time to plan for future events. Also, including the desire to incorporate the project team as users into the App.

A LOT OF 'LITTLE THINGS', as the title suggests, combines many minor problems raised by the users that currently hinder their usage and higher the threshold to interacting with the App. These barriers are both 'physical' elements in the App as well as mental (such as long pathways to get to your goal and disconnected feeling from the App missing brand recognition). Solving these is working towards smoothing the current user experience.

THE APP IS MORE THAN AN APP introduces new uses supporting the SPM transition and execution hereof. Initiatives for new uses are: using it to share & communicate (strategic goals) towards the whole organization, using the App to collect & provide a space where anyone can input an idea for a project and give special attention to finished projects. Overall, these aim to bridge strategy toward the whole organization through sharing, communication, awareness, and involvement.

Combining the insights of A POSITIVE FIRST IMPRESSION and working on a POSITIVE END. Referring to start the initial use phase experience to promote interaction and in the intensive use phase to encourage continued App usage, respectively. (difference from little things is that one is targeting the overall experience and not perse aiming to make it positive one but smooth, here it focusses on the aspect of users 'wanting' to/being motivated to/ continue to use of the App, for example daily for inputting)

THE SHIFT IN FOCUS is all about the user group. Originally the App is designed to provide an SPM overview for managing board members. Here it is all about the 'real' intensive users, the Project leaders and Program managers. They provide the input for the App and how to support them in doing so 'as easy as possible—also combining the insights of their focus on their projects and central action of inputting of deliverable status updates.

TRANSPARENCY, SECURITY AND ONE TRUTH are themes that cannot be taken lightly, considering the App stands or falls based on the input given. If the input is untruthful or outdated with the actual situation, decisions cannot be made, and progress is halted. The SPM app is supposed to promote these values, e.g. creating transparency by having everything documented in one place, ensuring the information shown is correct&up-to-date and supporting that everyone is aligned working towards the strategic goals.

Re-evaluating design leads

Starting with a quick overview of the main design leads from both research phases combined. Herein double's, and similar insights have been combined to form a comprehensive list that can be used to reevaluate the design leads for following generalization and validation analysis.

Cross-check

current findings are only resulting from 1 context, therefore context-specific. About App for multiple different organizations, the goal is to scale up and generalize to see what is valuable for the users, being the different organizations using the application. A small scale, quick analysis into validation of the research findings aka. Which design leads can be used for design ideation and development.

Approach

The cross-check is an informal analysis study into validation and generalization of the findings. The set-up is; to go over the design leads and based on findings. Through discussion, I found out whether they are also observed at other client organizations currently using the App. They shine a different light on the findings and compare notes on whether the observations occurred in other organizations. Three authorities were approached, including another organization's representative and Jigseye, who closely work with the SPM App.

Validation

The discussion was insightful, completing and confirmatory. Overall the research findings' match' with what they observed and got back from the other organizations. From the feedback from other organizations using the App, most of the optimization points mentioned mainly focus on bugs in the App they encountered. It also became apparent that Jigseye currently focuses on that area, putting effort in small things as bug fixing aiming for 'smoothing out the user experience.

The research outcome (defined design leads) is confirmed and can be generalized and validate their value for other organizations. Furthermore, the design leads are valid for further developing the App and design for them.

**Insights found
within 1
organization**

**Checking for
re-occurrence of
insight in other
organizations**

**for
generalizability
& validation**

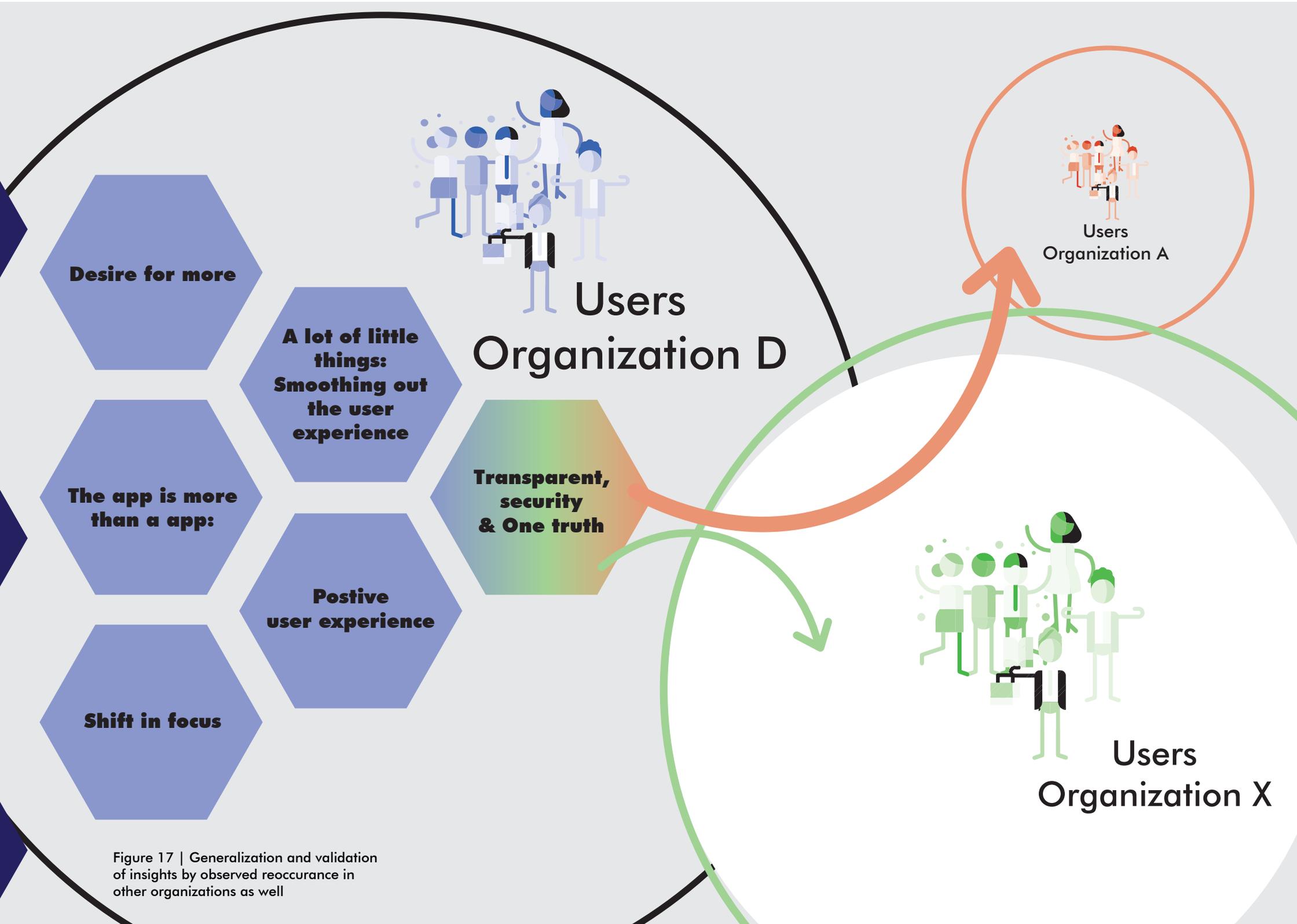


Figure 17 | Generalization and validation of insights by observed reoccurrence in other organizations as well

Conclusion: from research into design

A good question to ask at this point in the design process is what to do next? We have gathered all these insights from the research and now need to converge towards the design phase.

The Cross-check analysis showed that all the insights found in the design lead overview could be generalized and valuable for design development. Though this is an excellent outcome for the research, it does not help in the selection. Therefore, taking it a step further, this analysis implements an overview of where the design leads impact the users and Jigsyes perspective. Creating two map axis; horizontally differentiating the users perspective through their desires and needs derived from the user research. The vertical axis considers Jigseys current efforts and future aim for the SPM app, as found from the cross-check analysis. Additionally, the top axis shows the innovativeness of the area's divided into the labels radical and incremental innovation. Resulting in creating four parts of overlapping values, mapping out the design leads to areas of impact.

Taking a critical look at the design leads placement in the diagram, according to which area's they affiliate to, the result is shown in the visual mapping on the right. From the filled in overview, two general themes arise from the design lead groupings the orientation on optimization of features and user experience, left and right are's respectively. These orientations are consequently related as feature optimization affects user experience; however, they both demonstrate a different direction looking at the design leads in these areas.

Two leads stand out going into selection; the shift in focus and the App is more than an app introducing new user groups and potential new usage purposes, representing new and unexplored directions for the SPM App. The other design leads can be seen in a supporting role, e.g. a lot of little things, desire for transparency, and a positive experience are in a similar direction as a desire for more. They are targeting optimization and extending the current design to motivate continued usage. Overall, they are parts linking to the design lead, a desire for more, using that as the central point of direction. In a general sense, resulting from this impact analysis mapping, three main directions of interest: designing for new user groups and developing new usage purposes to create strategic awareness in the organization and optimization design for a positive, smooth, continued user experience.

To conclude, to work with the outcome of the research focussing on the three main insights; a shift in focus with the original app design focussing on the Managing board as target audience, now designing for the actual intensive users being the Program managers and project leaders. Second, there is a significant desire for more from the App to take into more functionality than what the original design allows. Third, the App is to be more than just an app, introducing the new purpose of using SPM for creating strategic awareness throughout the organization. I aim to fill that gap, taking these three insights combined to form the goal for the design phase.



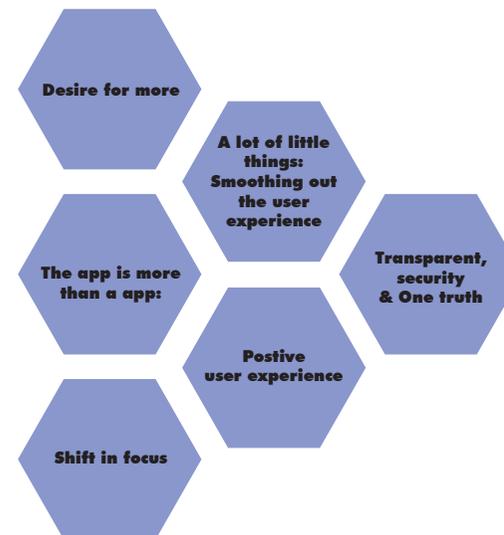
Current effort

current optimization efforts
focussing short term realization
bug fixing
smoothing out the currentv
interactio



Desire

ease of use:
Easy deliverable updating
overview, accessibility & security
(intensive users)



Research insights

Positive user experinece,
Transparancy and
security, a lot of little
things, a desire for more,
shift in focus, the app is
more than an app

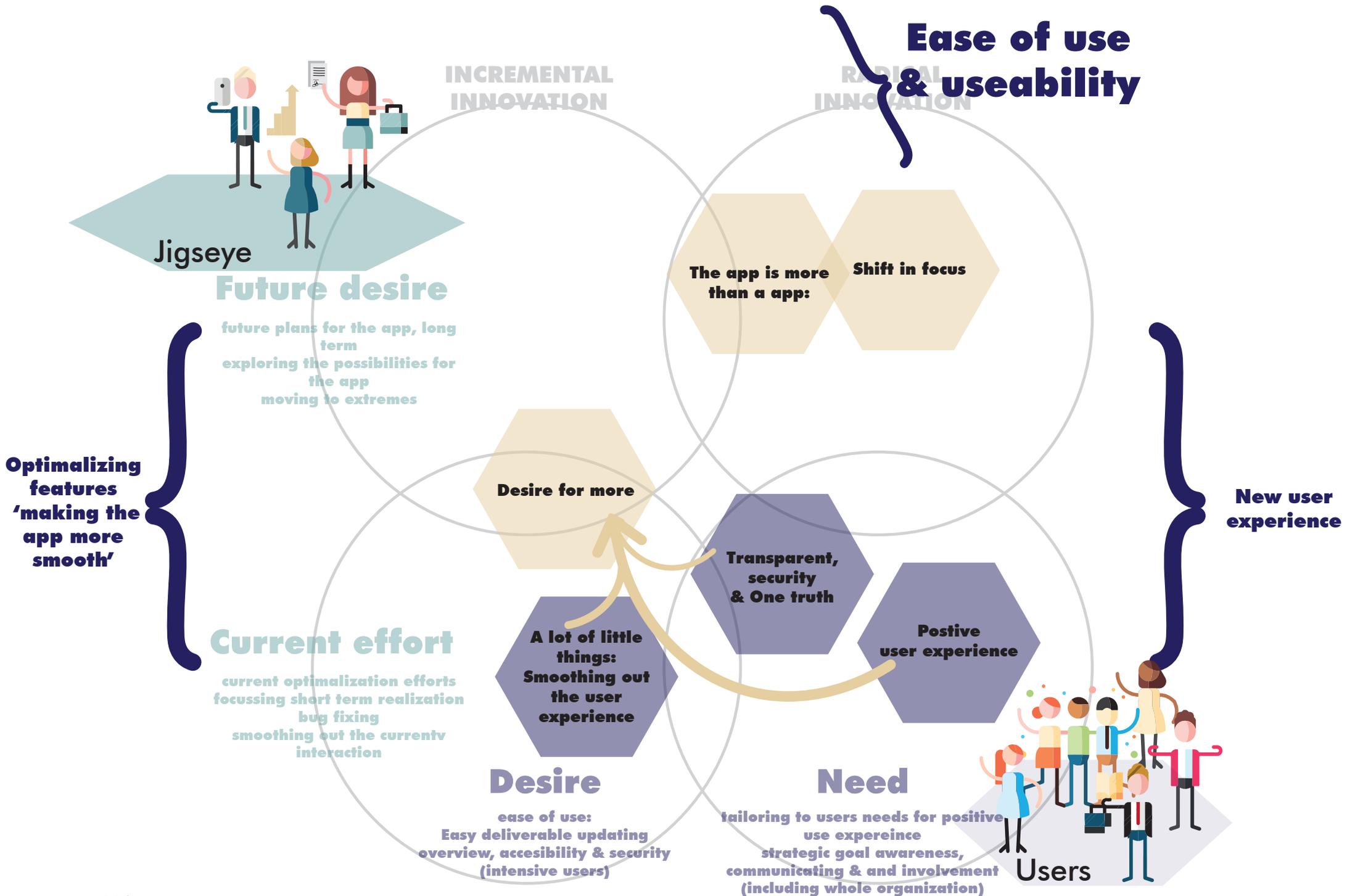


Figure 18 | Insights mapping over Jigseye's and users values, resulting in the 3 main insights for design

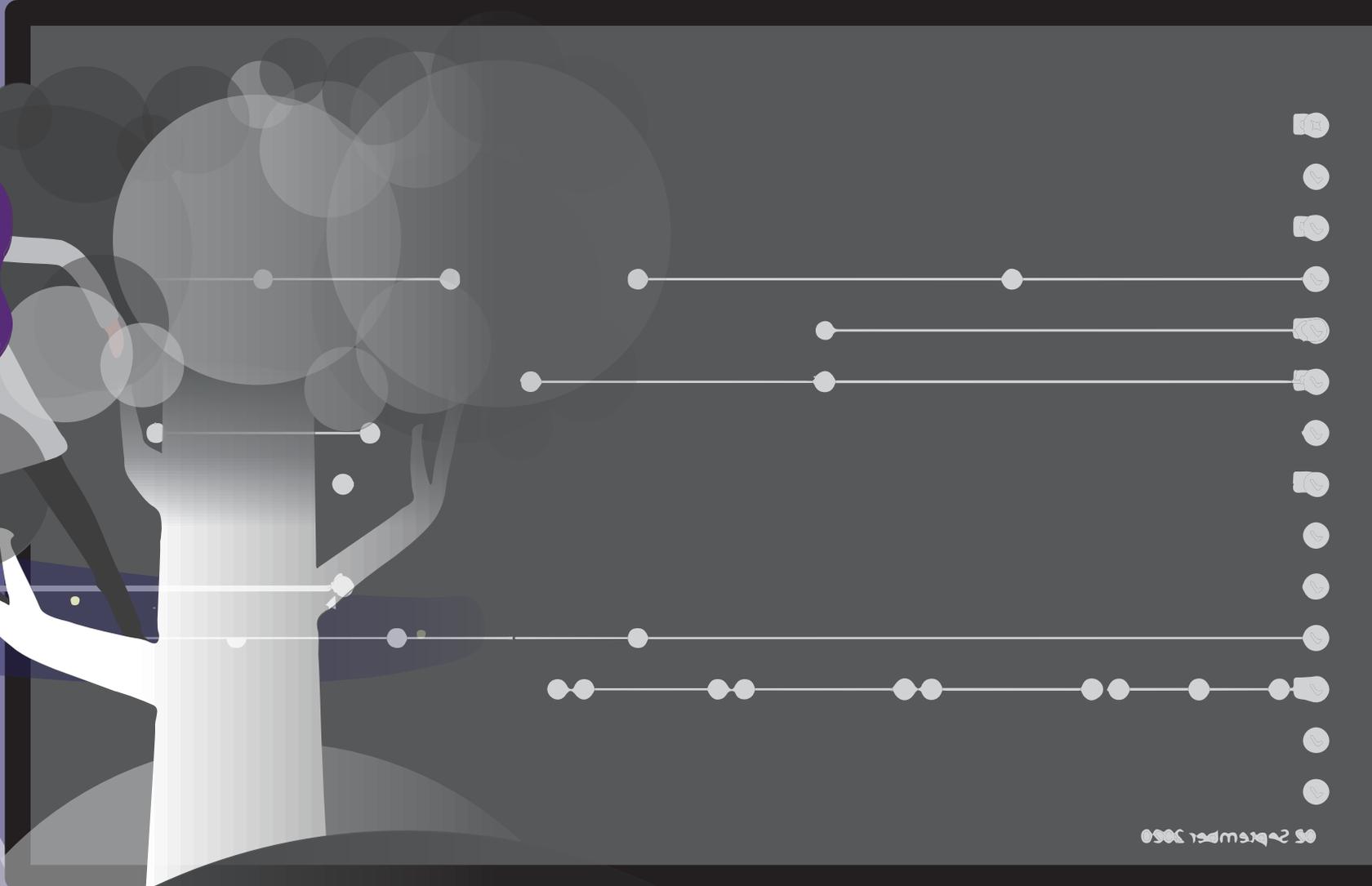
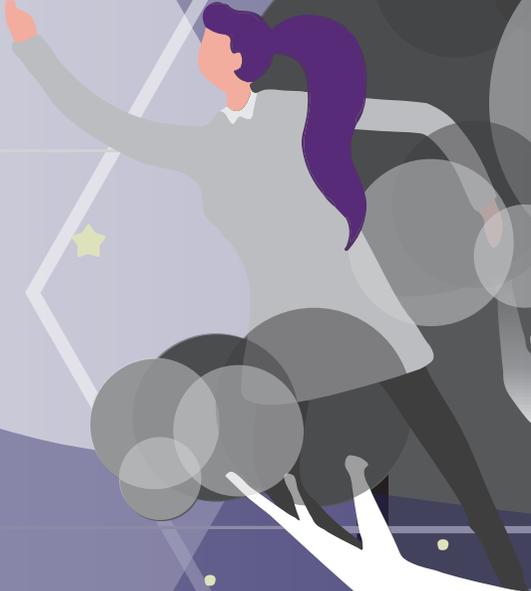
3 DESIGN

Applying research into the design by taking the UX/UI design approach. Continuing on the insights of a Shift in focus by designing for a new user group, The App is more than an app is introducing designing the additional purpose of the App towards strategical involvement and A desire for more directing to design for functionality. With this, my design vision is formed; Becoming the tree that helps you reach the stars. Alike the tree, the SPM App tool helps you get closer to the strategic goals, but you have to climb it yourself, e.g. supporting the user in inputting and interacting and, with this vision in mind, guiding the new design to take shape.

This chapter contains the central stepping stones of the design process, going from the design vision directly into the three new feature concepts behind the final design proposal. A brief side tour introducing the new user group that comes with the insight The App is more than an App. Special attention is given to the feature design for a shift in focus, designing for the three intensive user groups on tailoring the designs to addressing their individual needs. Followed-up by elaborating the new feature designs resulting in the finalized product overview, including creating the supporting mobile SPM App version. To conclude with new opportunities through designing for in the new way of working leading into the next chapter for implementing the designs.

The design phase early steps focus on the usage & experience goals behind the three proposed features, e.g. the UX aspect of the feature design. The iterations and expansion objectives focus on the UI aspect, including orientation, features, looks and more, taking a step deeper on supporting and working out the UX concept. The iterations and design steps can be found in Appendix 9 SPM App design, providing a detailed recounting of the design process and designed features.

BECOMMING THE HEART OF THE ORGANIZATION



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Becoming the heart of the organization

Crossing the bridge into the new designs based on the research outcome. This paragraph first looks into the design goal and design vision inspired by the user's feedback and research observations. Followed by the new feature designs embedding the research insights. From hereon, continuing directly into the final designs proposal. The following pages will go slightly into detail on the user groups designed for and highlighting a few of how the capabilities of the new features support them.

Designing for research findings implementation

The challenge for this design touches upon four essential points;

- designing for optimization of the App for the intensive users, incorporating design facilitating to the users' needs
- Designing for a new purpose; seeing the App as the central communication tool of strategy in the organization

aiming to do so through by

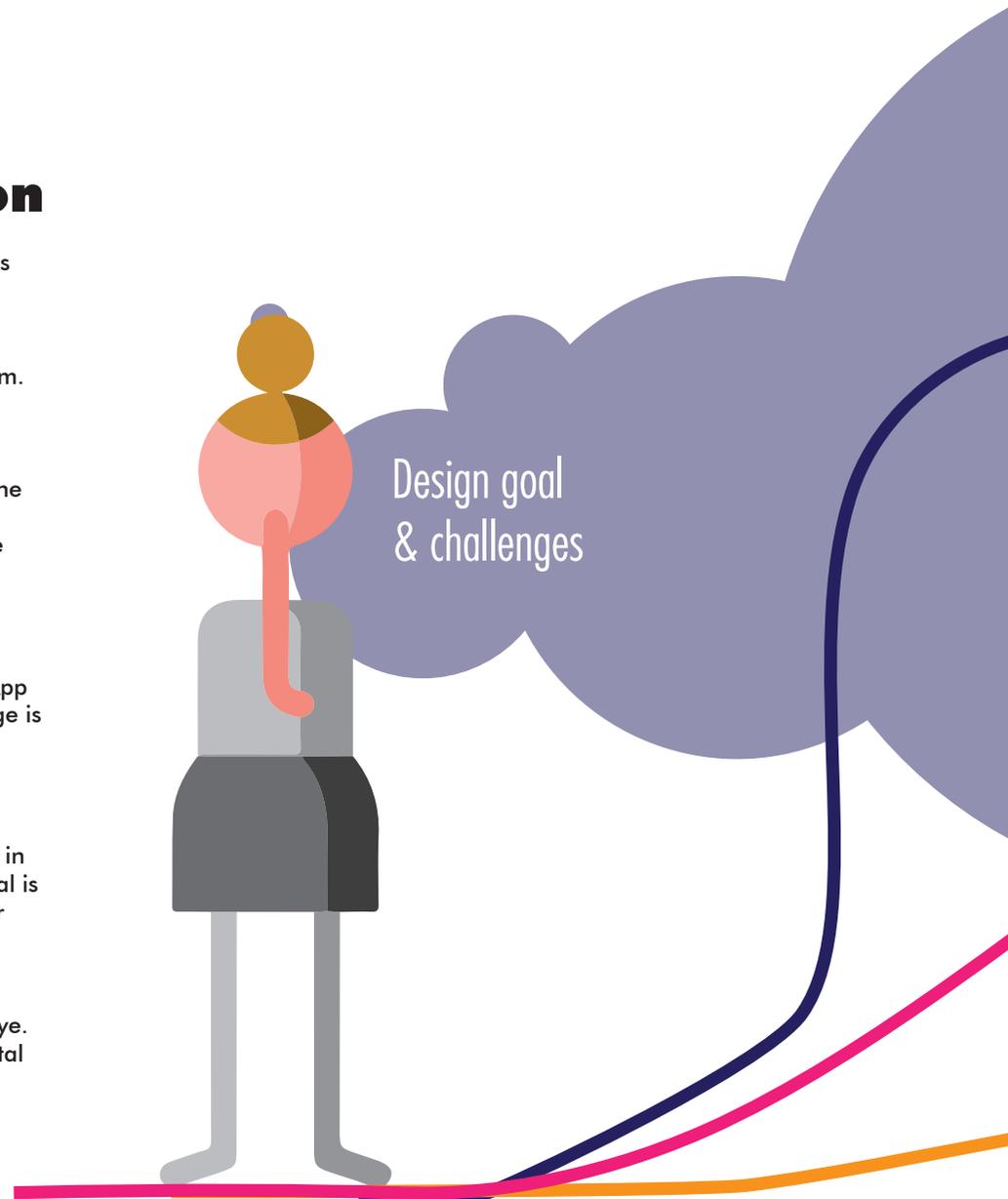
- Bringing research insights into the design
- Transforming rough thoughts/ideas into realistic and practical concepts

The first two challenges are directly connected to the research insights of a shift in focus, and the App is more than an App, linking up with the challenge to bring research into design. The final challenge is for the result of the design phase to make an impact having value through being directly useful for Jigseye, for example, by feature implementation in the actual App and application in further user testing.

Continuing on the challenges is the design goal; a generalized abstract description of the solution, in other words, a direct translation of what attributes will be created. For the SPM App design, the goal is to facilitate, support and motivate the users to input into the SPM App through creating features for ease of use, targeting inputting and interacting. The ultimate goal of the App is to help achieve strategic goals.

To summarise, the designs aim to impact the user's needs and create a valuable outcome for Jigseye. Based hereon, the outcome of the design phase will take shape in the form of Hi-Fi designs; a digital 2D realistic representation visualization of what the new SPM App tool concept would look like—providing the thought process behind the purpose and proposal of the new design and interaction experience with these new features. Interaction scenarios and visuals are created to illustrate, leading to the new way of working with the App design.

The design development is concluded at the final Hi-Fi design proposal. At this point in the design process, considering creating an interactive prototype, I believe it won't provide additional value to the outcome compared to using scenarios to explain the envisioned experience. Furthermore, because for this project, continuing onward with the design testing is out of scope, an interactive prototype is not yet needed—instead, a proposal for the continuation of this project through design testing is set up in chapter 4, Implementation.



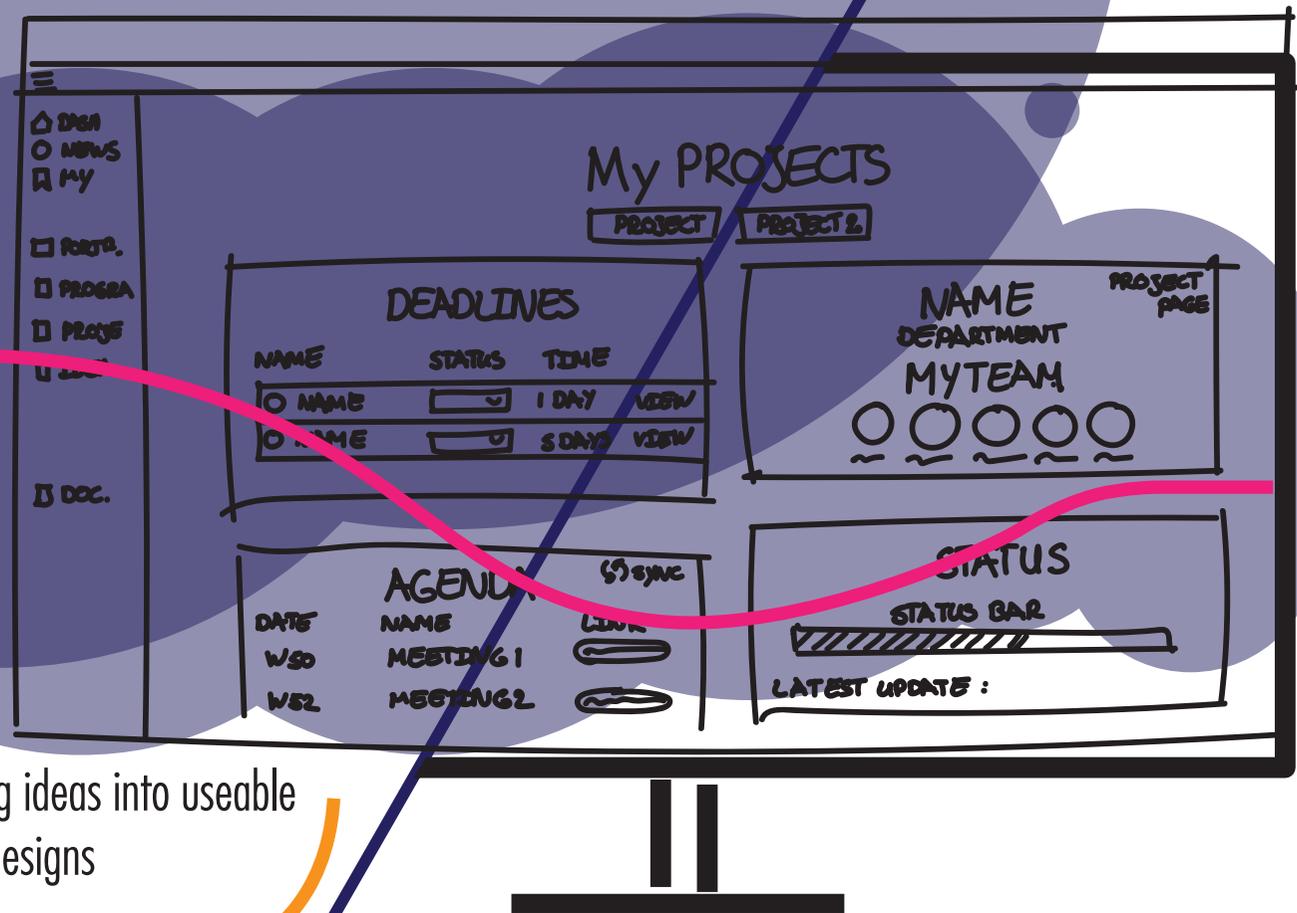
Bringing research into design

Figure 19| Design goal & challenge visualization: brining research into design and turning ideas into useable designs



Designing for the intensive users

Insights leading ideation



Turning ideas into useable Hi-Fi designs

The 3 new features. . .



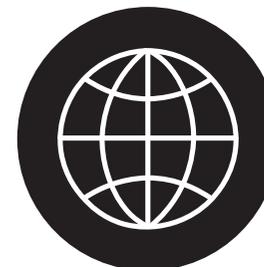
OVERVIEW Higher management desires the big picture of the strategic transition and project status that influences it. They are interested in overview (not at the details) and being involved/notified at the right time.

Overview



MY PROJECTS is to support the 'main user' the Program managers and Project leaders in inputting, making it more direct and simple to do. It provides overview while satisfying the need to go deeper into the project, such as to involve the project team and meetings.

Ease inputting



NEWS PAGE provides a place that connects everyone to the strategy, showing what the organization is working on in a stimulating way while giving the opportunity to be a part of it through inputting ideas. present them with a inviting/nice to look at page.

Strategic involvement

The three new ideas

The design phase focuses on the design outcome; for those interested in the background ideation, coming up with the idea for these features and iterative process towards creating the final Hi-Fi designs, view Appendix 9.1 for in-depth design process steps.

Translating the design challenges and goals into a holistic and abstracted description of what that solution would look like results in the interaction vision of becoming the tree that supports you reaching the stars.

Visualizing the vision, as shown on the chapter intro page, literally seeing the stars as representing the strategic goals that you aim to reach and a tree that provides the possibility to climb higher up to become closer to reaching those goals. The tree reflects the SPM App; it supports the users while they still have to climb themselves. The action of climbing higher is a metaphor, meaning that inputting and interacting with the SPM App accelerates in reaching goals. Emphasizing that the SPM App facilitates a supporting role to the users, providing ease of use for inputting and interaction, including updating deliverables to attain project progress leading to achieving the strategic goals.

Starting up design ideation from the point of designing for usability. The initial ideation direction makes climbing as easy as possible, e.g. through ease of use by looking at feature optimization and creating a smooth interaction experience resulting in many small feature proposals. That is when I had an epiphany; combining the three main insights linking up with multiple feature proposals resulted in three new interface designs. These became the beginning of the concept of the SPM overview page to provide an overview on strategic progress and the strategic goal formulation related hereto, the My page a personalized page for each intensive user tailored to their needs facilitating ease of use for inputting and the News page providing a place for sharing and communicating strategic content. Fun fact, The new features name is reflecting its purpose. The idea of the additional three new App features/pages encompasses all the design challenges, addresses the user groups' needs, and incorporates the user research as each feature is inspired by one of the main insights. Later added are specialized new features detailing the design concept directions; the designs are further explained on the next page. There is something for everyone in these three proposals; the following paragraph illuminates each feature in relation to the user. The design proposal will be further explored throughout the rest of this chapter.

The whole organization as users

We have already met the intensive users up close in the user research: PL, PM, MB. Learning about their role in SPM methodology, exploring their way of working with the tools and discovering their goals and needs in attaining them, particularly involving the App use experience building up to the insight of designing for A shift in focus and A desire for more.

The user research also introduced the newfound desire, especially proposed by the MB and PM users, to involve the whole organization more, both overall and into strategic goals. For example, in coming up with ideas for new strategic projects, communicating on current initiatives, sharing strategic goal information and even for a message from the CEO to encourage everyone in these covid-19 times. Overall leading up to the insight that the App is more than an App.

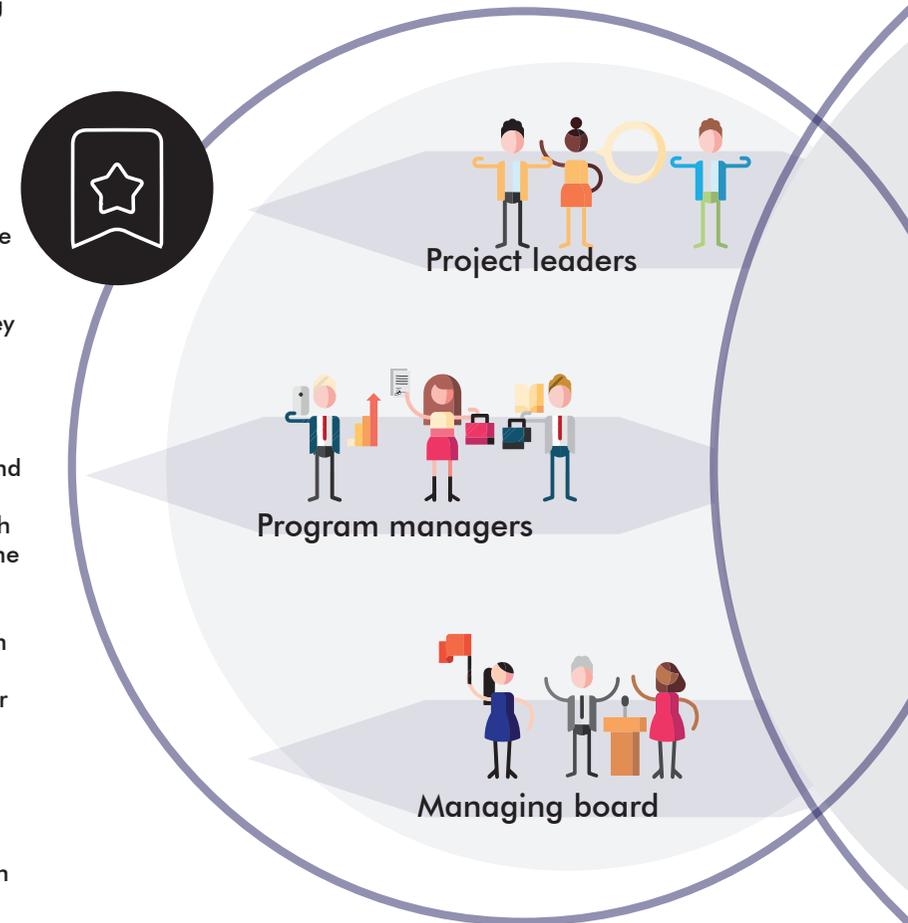
Looking back on the initial user mapping, now added hereto through the above-mentioned insights, further detailing leads to the definition of the intensive user group consisting of 3 groups and the introduction of the new user group of the whole organization to the SPM App design. This paragraph sets the new design features in relation to the user groups, highlighting designing for new and diverse user groups all being combined in the new SPM App.

Here, I take another look at the impact of implementing this new user group in the designs. Since they did not come forward through earlier analysis or are directly involved with the SPM methodology or assessed in the user research, I reassess their influence and interaction with the App and other users.

To begin with, it is worth mentioning that the intensive users are a specialization of the whole organization group, as shown in the initial user mapping, which means that they have overlapping and different goals with the App. To illustrate, the intensive users focus on inputting using the My page following methodology principle. In contrast, others who currently do not work on or are involved with a strategic project interact out of personal interest or curiosity, looking up strategic content on what the organization is currently working on.

That is where the News and Overview page features come in; they satisfy the need for curiosity and information consumption. Que the new user group: enter everyone else in the organization. Earlier in the illustration on the News page feature, their involvement with the SPM App is already briefly mentioned to be that of an explorative origin. Both pages facilitate functional features and content for the intensive users supporting their day-to-day interaction with SPM while also providing interesting elements for the other users. To illustrate, the update feature on the Overview page has a double effect, giving a summarised overview on framework progress to an MB user as well as showing to other users what the organization is currently working on. Furthermore, features such as the news page are both celebrating the accomplishments of the intensive users, such as through the spotlight and the idea input via the idea box that stimulated the start of that project, bringing users together on one page.

That is also why the new Home is so important; it ties together not only the three main features of the My page, overview and news page, providing an accessible overview and navigation panel; in doing so, it brings together the interests of all the user groups into one page. The home page design is specially created to be more than just an opening page. With the content tiles, easy navigation to the key features is possible, while shown under it is a preview of each of the featured content. To elaborate, under My page facilitates personalized content directly from your My page; including quick update options showing the recent deliverable allowing for direct updating from the home page if in a hurry. Providing strategic progress and recent framework updates and showcasing the latest news added to the My page, tickling users curiosity to explore content.



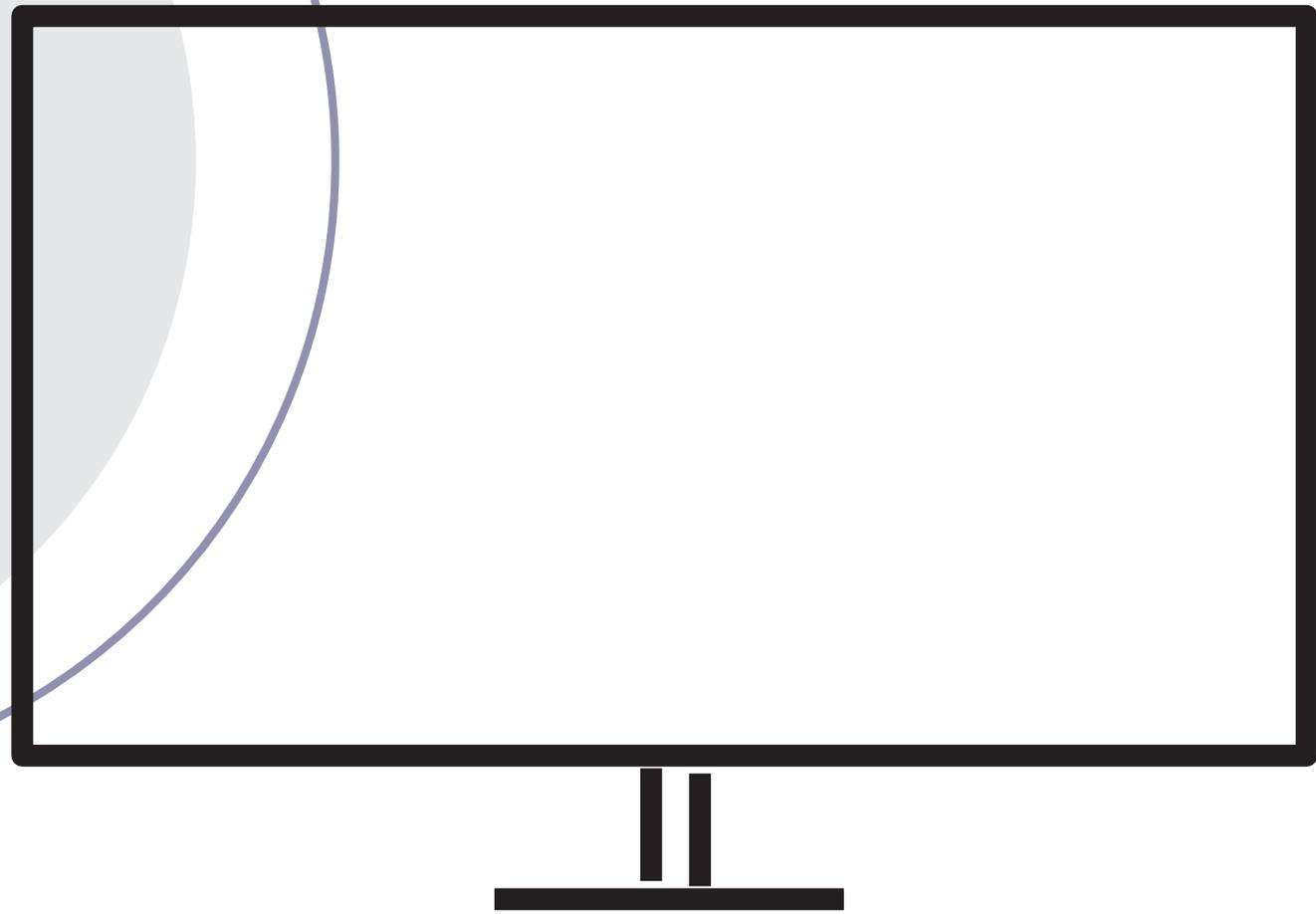
INTENSIVE USERS

Figure 20 | The 2 usergroups: intensive users and whole organization with the SPM App features. On the right: new home page design, brining it all together in one interface



It stands to reason that the non-intensive users do not have access nor need to access the specialized features for the intensive users. The design consideration for creating two outlooks of the SPM app addresses the differentiation in user groups authorization and access to content. Coming from the research insight for a desire for transparency and security is the consideration for restricting access to app features. This measure is oriented on warranting the truthfulness of inputted strategic content, such as framework updating and project deliverable status input. For example, only a Managing board member should be able to edit the framework, and a Project leader should be able to update deliverables. If any user can edit or input in the App, it would become chaos, e.g. not trusting what is shown the App would completely derail and not be useable. Of course, except for the idea inbox that is intended for inputting by everyone.

This means that the intensive users and non-intensive users view a slightly different version of the SPM App, the main difference in the intensive user having a personalized My page as long as they are involved in a strategic initiative. In general, all other features are widely accessible for viewing, with only the intensive users having the status clearance through having a My page to edit information. In a way, the My page is another security defence of the App to secure the line of input. The detailed design proposal, including the new menu design specific to the user group content accessibility, can be found in appendix 9.4, designing for the whole organization.



Incorporating the 3 new features of my page, news and overview

Providing content for all users

Creating a new overarching style and lay-out

The New design for the SPM App

Taking the design idea of creating the three new features and the design for the new additional user group. A whole new design for the SPM App is established, incorporating these new views and creating the whole picture that ties them together.

New features

the new features of the Overview, My page and News page design are shown on the left side of the overview. These are the main features and target intensive users.

The My page is a special design for intensive users. In the design process, I created a dedicated version for each intensive user group tailoring to their needs from the SPM app in relation to the SPM methodology.

Herein the News page and Overview page also support creating awareness, involvement and communication towards the whole organization. Besides supporting the intensive users in their task, These features are intended to motivate non-intensive users to explore the organization's strategic goals and direction.

The features on the right side support function to the SPM app usage, providing the background database where all the project information is stored, aka the logbook and project page. These are not intensively used. They function to look up details or more information on a project when necessary.

Hearing navigating, finding and the information presented are key supporting the process. I re-designed and optimized these pages to fit in with the new design and users desire for the App. Moreover, the design process of these pages in appendix 9.2-4.

Embedding brand style feeling

The SPM App is embedded into the client organization. To make it feel more part of their organization, the App takes on the brand style of the client instead of Jigseyes own brand style. This was a critical point raised under the insight of a desire for more. The importance of the outlook of the SPM App to the users; to both feel like their own, motivate and inspire to work with the App. Considering that the App will be used by various client organizations. For each organization, the brand's brand style is represented by embedding the three brand colours as style highlights throughout the App, as shown in the buttons and dashboard. Besides the brand style, a playful layout of content, visuals, icons and engaging interaction through buttons and stabs construct the overall inviting style of the new SPM App (features). The example on the right is for A, the organization that cooperated throughout the user research; their brand style is represented by using their blue(tones) used in the App. The overall style reflected in the thin icons, open layout, and fresh font used reflects Jigseyes house style by aiming for light, fresh and minimalistic. The result is JigseyeXA App style.

For the complete considerations on the style creation view appendix 9.3, Style development. The implementation continues heron exploring the App style for other Jigseye clients, in appendix 10.2.

AT HOME IN THE APP

Accessible SPM anytime

In parallel to the design of the new features, the development of the Mobile app version started to take form, focusing on and around these three features for increased accessibility, ease of use and facilitating inputting.

The importance of accessibility to SPM

Early on in exploring the SPM App, I already had a hunch that a mobile version could highly contribute to the concept of the SPM App heightening accessibility; research supports this.

From user research finding that accessibility is an issue and of high importance to support successful SPM execution. For example, shown through the influence of covid-19, the physical tool allocation, both out of research hindering the intensive users in their day-to-day SPM inputting resulting in misalignment between the status reality and that of the SPM tool and thus consequently slowing SPM goal attainment.

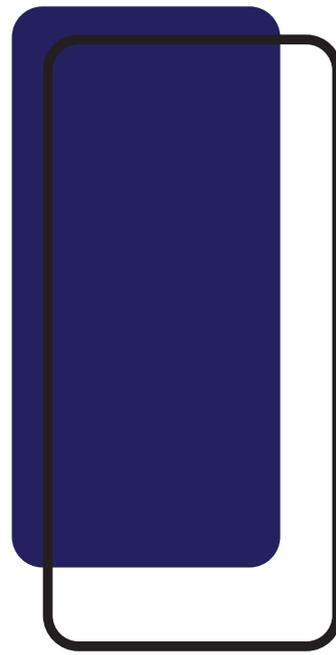
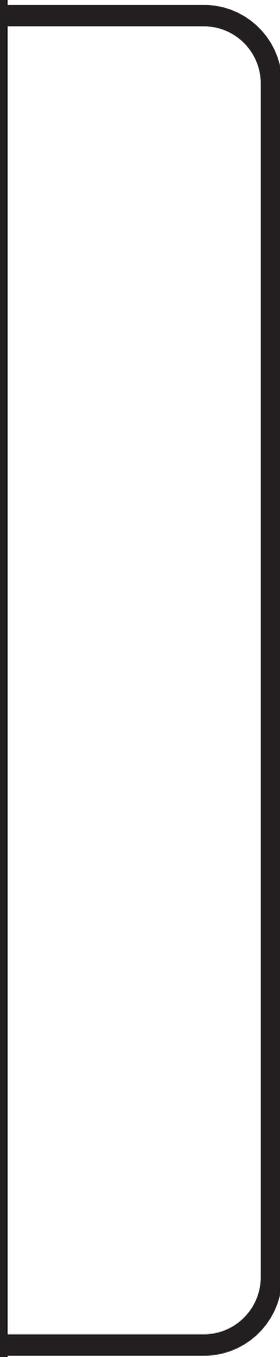
Always at hand with the mobile version

Access anywhere, any time; on the go for a quick check-up or inputting or view new updates and always in reach with SPM in your pocket with the SPM Mobile App. With the addition of the Mobile version, flexibility and accessibility to SPM increase. We use our phone for almost everything and always have it with us, making it a perfect window to stay connected with SPM. Get notifications and be alerted for upcoming deadlines right from your phone to your laptop.

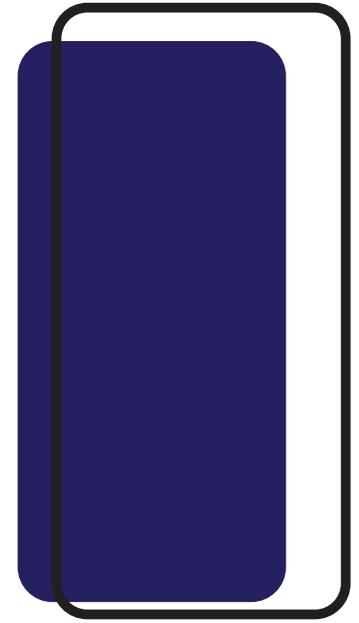
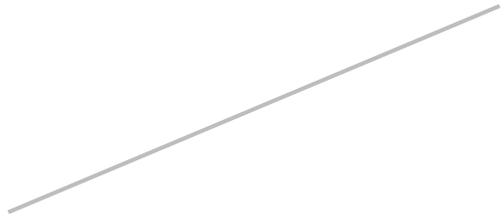
The App covers about 60% of the PC versions features, focusing on only implementing select functions supporting the three primary purposes of the SPM App: inputting, awareness, and involvement. Each relating to the three new feature designs of the My page, Overview page and News page. With these features, the SPM mobile App has something for everyone, engaging with all the organization's users. For the Intensive users, it is a quick and easy option to update and input; for non-intensive users, there is strategic content and news to explore and engage in what the organization is currently working on (the organization's current initiatives).

The style and layout of the Mobile App take on the PC version design. Showing strong resemblance and relatability to stimulate recognizability for the user and aiming to interact with the features as similar as possible so that switching between the media usage is a smooth experience.

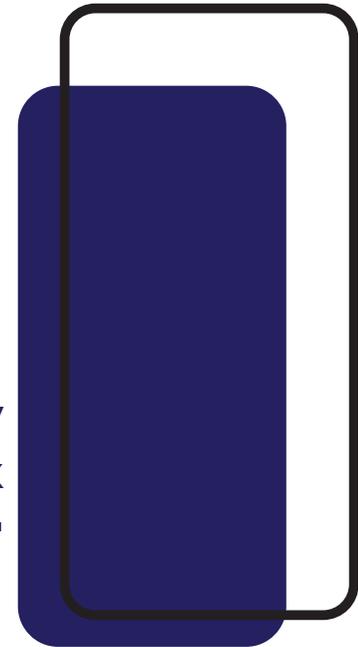
Additionally to the PC version, the mobile App is a luxury; the PC version facilitates all functionality needed. The mobile version expands hereon by increasing mobility and flexibility of use, providing the option to update and get notifications via phone (e.g. considering surroundings, at any moment and place taking your phone out of your pocket is much easier than having to set up your laptop to review an alert message such as in the elevator). Moreover, diving into the new way of working with the SPM App tools on the following pages.



**My page
for Quick updating**



**News page
for communication & sharing**



**SPM Overview
& Idea box
promoting involvement**



Figure 23 | The new SPM Mobile App version Hi-Fi designs with the 3 main features.

A new way of working

Continuing on the interplay between the PC And Mobile SPM App, a new way of working with these tools has to be established. With the introduction of the new SPM App, there is a new way of interacting, and thus the way of working has to be reviewed/renewed. This has already been partially unveiled through the user research. However, there is not yet a new version of the methodology incorporating the new tools and the new way of interacting. Here is a preview of the proposal for the new way of working could look like showing the.

The HTA analysis of the new SPM App structure and user scenario design for the features interaction combined gives a comprehensive overview of how features relate and interact, supporting in designing for the new way of working.

As earlier introduced the execution of SPM is structured through the SPM methodology, which is supported by the SPM App and or physical tools. Moreover, later in this paragraph. The SPM methodology consists of dedicated tasks for each intensive user group which are in relation to the SPM tools interaction previously the physical SPM Wall.

Fully equipped with the PC and Mobile version

The PC and mobile SPM App versions work together to facilitate continuous connection and up to date with SPM. The pc version provides the complete SPM overview with the possibility to go in-depth; with the Mobile App, a quick impression of overall status and progress is achieved. Choose which is needed when it's needed.

The mobile App is creating the possibility to access anywhere, at any time and with the PC App to provide additional background to always having SPM accessible for every situation. With both, SPM is always at hand to quickly look something up, whether discussing a project at the coffee machine or diving into detail during an SPM meeting.

Benefits of the new way of working

In doing so, the entire network is involved and maintained up to date.

Everyone is working on 'one truth' and notified at the right moment to take action when it matters most.

Research situation VS new situation

An upcoming question is whether physical tools such as the SPM Wall will still be necessary besides the SPM App. The user research briefly touches upon this subject with as a result; there is both support for going fully digital and still seeing value in the physical tools. This is a question to be answered in follow up user research study.

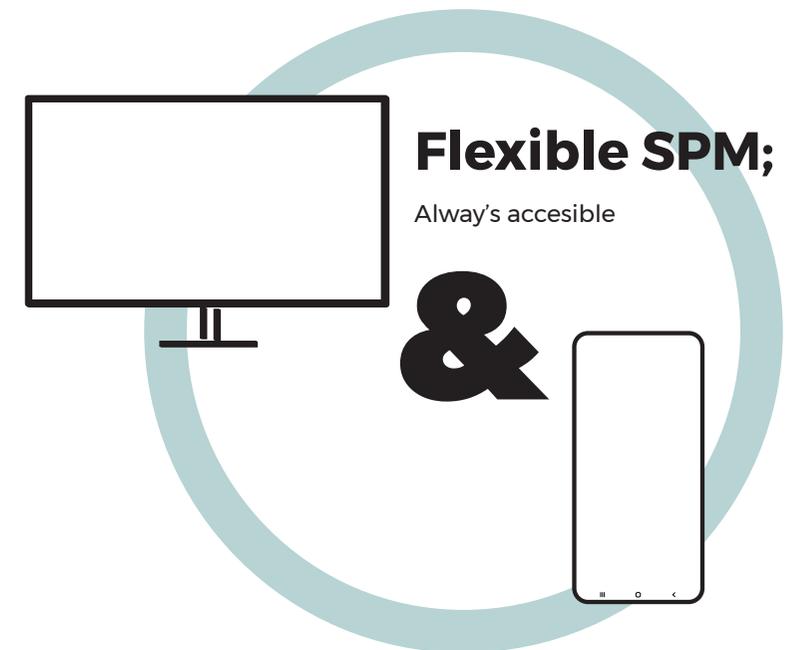


Figure 24 | SPM PC and Mobile app design, on the right, the new way of working interaction scenario

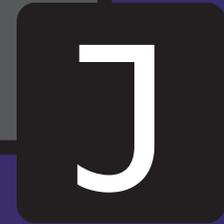
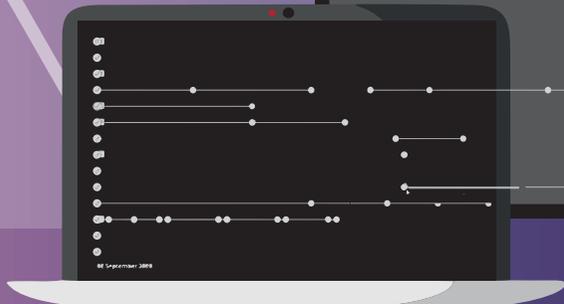
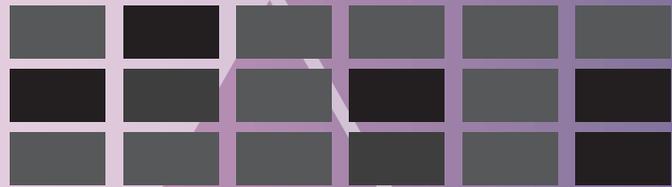
4

IMPLEMENTATION

With the design in place, it is now interesting to question how the design can be useful?

This chapter looks into implementing the designs exploring various directions, and introducing a proposal for further design development. Also, taking a brief look at the implementation map, proposing which features to push for implementation, looking at Jigseye's and the user's values impact.

Jigseye ne



Branding

With the new design for the SPM App comes a new outlook. This chapter briefly touches upon branding and marketing opportunities with the new SPM App for Jigseye. Note that the App is intended to be used after the SPM sessions when a client is at the point of implementing and moving towards SPM Execution. Important herein is creating an as low as possible threshold to start out with the SPM App.

Jigseye One

The new design calls for a new name for the SPM APP, something catchy that the users will call out when saying 'I will update it in . . .'. Ideation and selection resulted in the name 'One', first mentioned by one of the users in the research 'working on one truth'. that sentence stayed with me throughout the project as it beautifully captures the App's essence. Additionally, one represents the bringing together of the whole organization and strategy in one place through the SPM App features. (input, bringing everything, everyone together in one place). For more background on the names, analysis and list with all the ideation and names origin, view appendix 10.5 Into Branding.

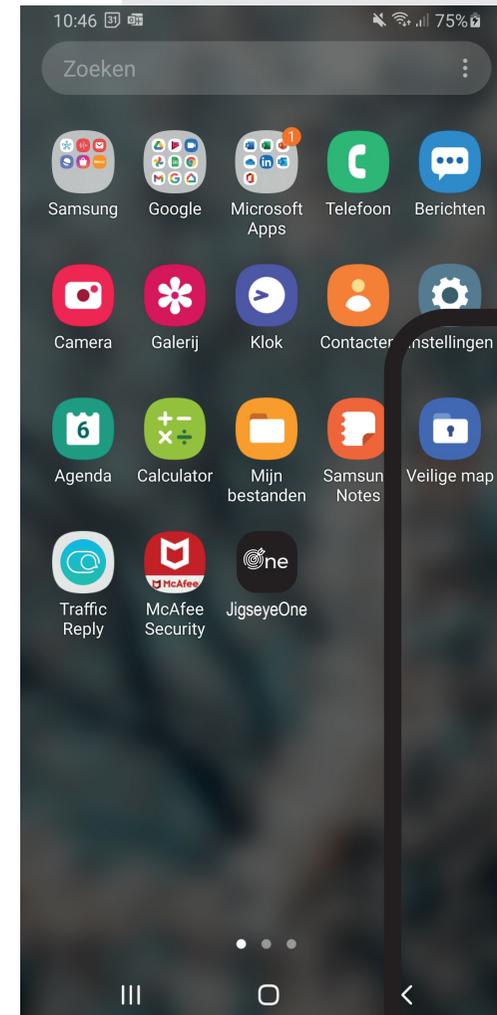
To get started with the SPM App; convince and support

It is all about creating a low threshold for the users to start interacting with the App, doing everything from Jigseye's side to make that barrier as low as possible. It is about convincing the users that the App is what they need and support them to get started.

CONVINCE Starting with SPM is no easy feat and intimidating as found through the SPM process journey analysis Appendix 4.2 The current Jigseye journey. Seeing that there are easy to use tools to support in attaining successful SPM is a mighty competitive weapon to convince potential future users. The new SPM Identity test is herein the first step to getting users to explore SPM; this report focuses on the SPM app; when interested to know more on this tool, view appendix x. Second is the SPM App that is active in SPM execution at the end of the SPM process, making it difficult to introduce the tool in an early stage in the process. By showcasing its capabilities and benefits to attaining SPM success on the Jigseye website, it gives the users a peek into what they can expect—functioning marketing goals to attract and motivate potential new clients for the usage of this tool, furthermore, highlighting Jigseye's innovation and expansion towards digital.

SUPPORT Currently, this is done through so by sharing an email with the login link to the App, which is faced with problems such as the link not working or the email getting lost or facing problems in initial app usage resulting in which could take weeks to take action on, delaying SPM. Everyone in the organization should be able to easily download the App on their phone and laptop; it has to be accessible. Google Play is an example of a service store that is widely available on almost all devices. Some devices such as Apple and Samsung also have their store specific for their product lines. It is a must to quickly expand to other systems such as Apple and Microsoft devices and support compatibility to increase accessibility.

As shown through the user research observations, the introduction event of the SPM App was found sufficiently by the user to start initial use. However, not everyone in the organization is able/present at that such an event. To support all users starting up and providing a way of doing it themselves, cutting time and preventing problem delays. The Jigseye website dedicated page to the SPM App providing download content and initial use support in the form of small guides and examples, having everything you need to get started on one page. A final note; the user is the one who has to push the button to download and go!





Je favoriete apps. Op een betrouwbare plek.

JigseyeOne Haal meer uit SPM with JigseyeOne

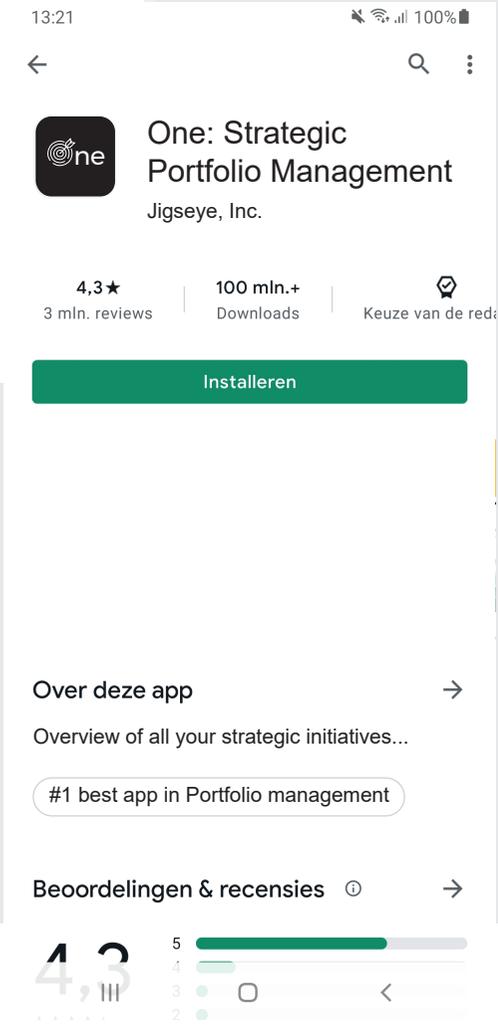
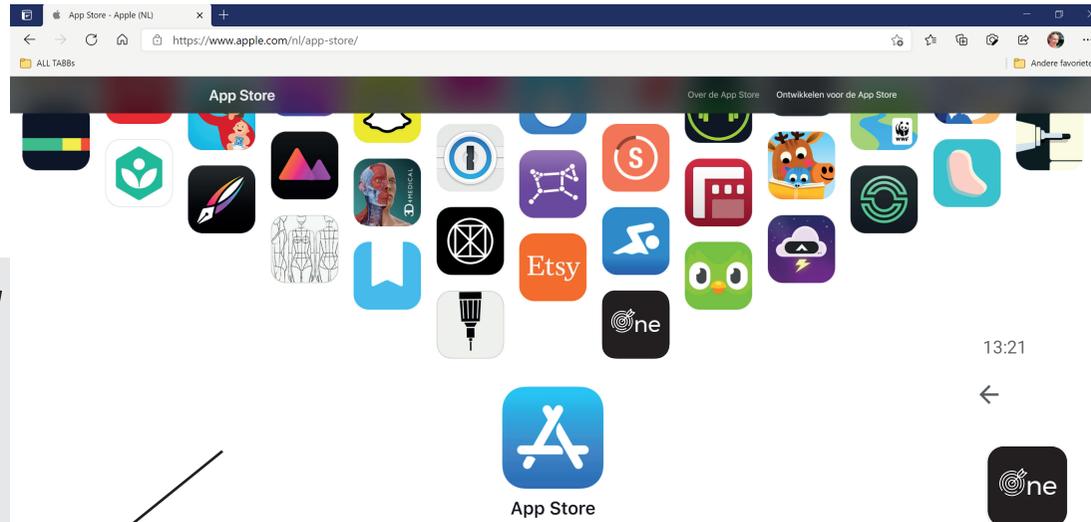
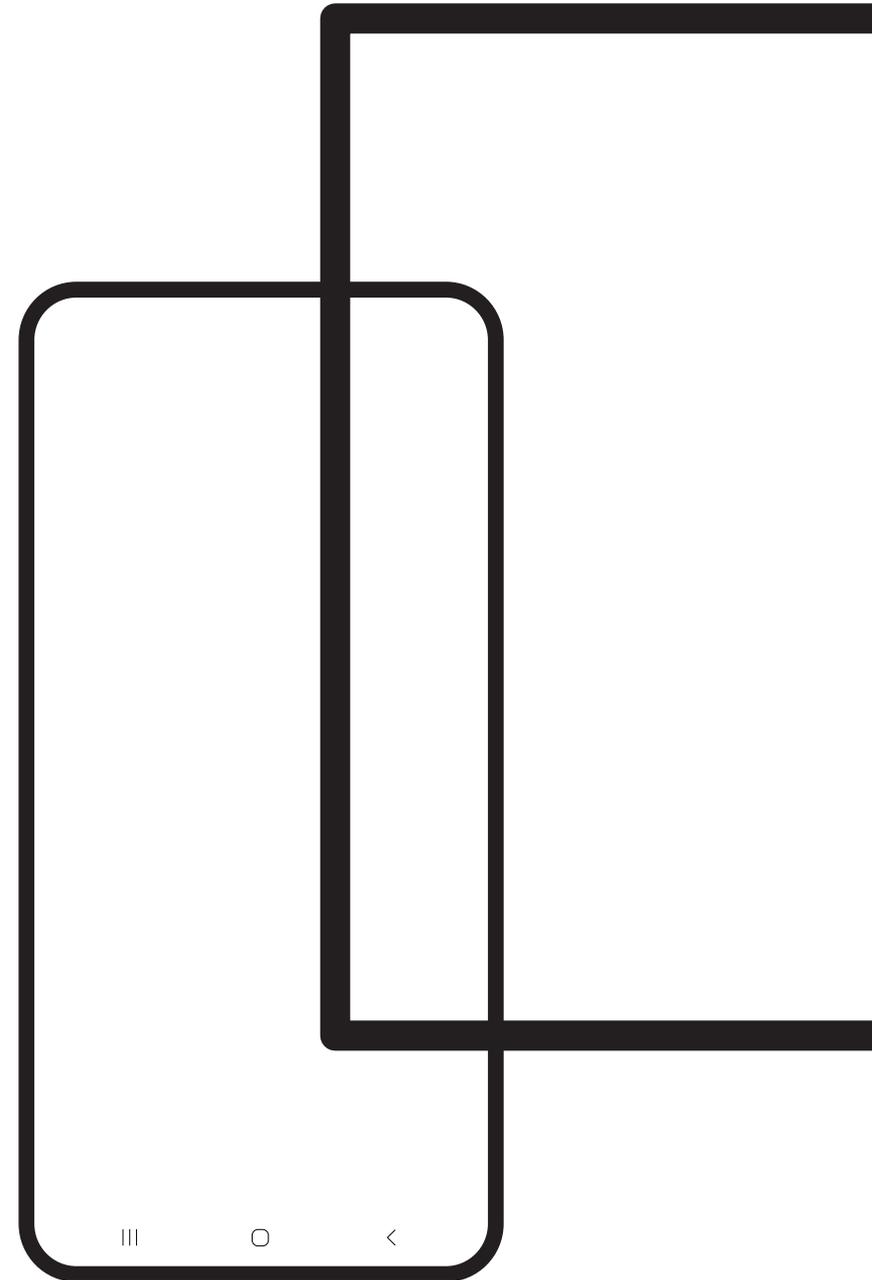


Figure 25 | Branding endorsement and implementation proposal for the new SPM App: name and logo design with supporting media marketing accessibility

How can the designs be used/useful?

So what is the next step for the designs? Part of the implementation looks into how the design resulting from the design phase can be used. A quick look into each direction and what possibilities are herein and how that would look



CONCEPT CAR: the ultimate SPM App preview. Aligning with Jigseyes future desires for the SPM App, the design proposal is a radical innovation compared to the current design. Most direct use is as a concept car, exploring and showing the potential possibilities of the App. They can be of great value to boost brand image and recognition to show off innovativeness and progress. Also, as a marketing pillar, these new product efforts motivating clients and future users for the usage of SPM.

PREVIEW FOR DIRECT IMPLEMENTATION. Explores the possibilities for live app implementation and view the hi-fi designs as a preview for direct implementation into the SPM App. The design would represent a 2D blueprint of what the SPM App would eventually look when implementing every feature proposal at once—for example, resulting in SPM app version 2.0.

CONTINUING ON DEVELOPMENT IN USER EXPERIENCE TESTING. Further development and design is always an option. Initiating another round of optimization through user experience-testing, validating the design proposals useability. This direction postpones direct implementation of the new features in order to early on filter out bugs and establishing a smooth interaction experience.

Involving users in the early design process

Design testing in the early stages of the design process to validate designs with user needs is underestimated. This paragraph argues why I believe in the value of doing user research, using examples from experience with this project.

To show the value this project brought through applying research in design, first, understanding the process behind the SPM App up until this point is needed. Here a brief recounting of the early development, which was faced with challenges and information gaps.

The initiative for creating the digital SPM App originates from Jigseye long-standing desire to go digital and the supporting push based on client feedback and stimulation of working more digitally. An external party is tasked with creating the SPM app for which Jigseye provided the original idea description based on the physical tools outlining some of the functionalities the App should contain. Unfortunately, for this project, I had no insight into the App development process, except for the idea documentation created by Jigseye. Development took place over several years up until launch in 2020, with optimization efforts still going, collaborating mainly with Jigseye on the design creation. Additionally, in the past year, with the influence of the covid crisis, with offices inaccessible and forcing people to work from home over a long period, a sudden extra push of the clients for digitalization arose, pressuring for faster implementation of the SPM App. Jigseye mainly communicates with Managing board-level members on the SPM App tool implementation. Overall, as far as known for this tool, there was no early-on user involvement in the design development in the form of peer testing or user interaction studies.

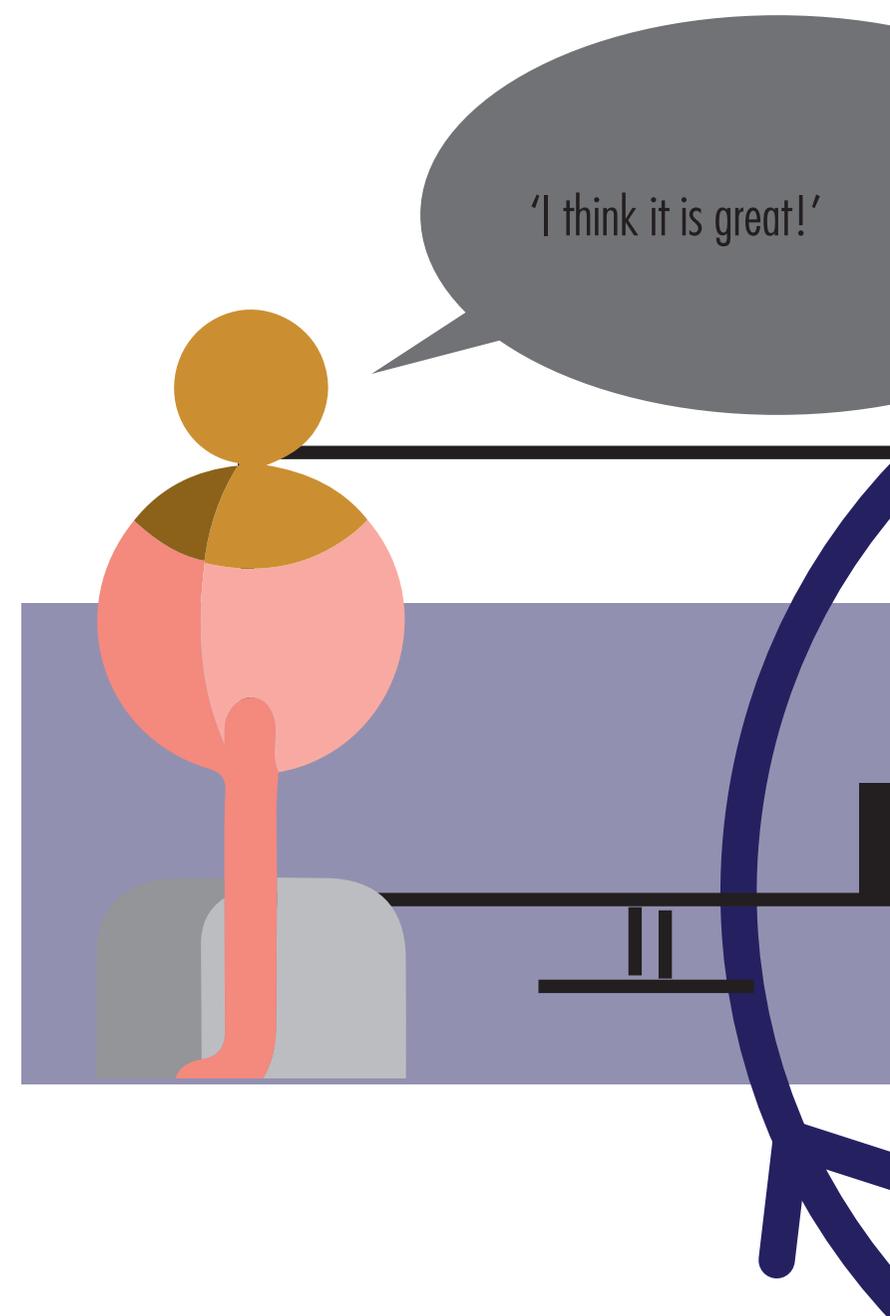
First, through doing simple peer testing of the Beta version of the App design, the SPM App exploration (my first impression analysis), already uncovered possible future problems for the user, finding many aspects to improve upon. Based on the reflection and insights, the first ideas came up with: options for improving features, experience optimization and new features implementation. Many of which were selected for direct implementation in the App and also later confirmed through user research. This is but one example of how easy and with relatively little effort spent, testing early on in the design process can hugely impact the final product outcome.

Second, the user-research study undertaken in this project is the first of its kind. This is one of the unique aspects of this research; directly involving the intensive users (besides the MB), capturing the first user interaction experience with the SPM App tool and gaining an understanding of their actual needs. Paraphrasing Hultink & Schoormans (2004) the main cause of project failure is undeniably the lack of involvement of people in the product specification phase (design development).

Many of the small optimizations that come up in exploration and user research, such as the findings behind the insight A lot of little things to illustrate implementing brand style and the long interaction pathways, could have already been addressed in earlier design stages. Doing these in-between designing development tests stimulates early on design iteration and optimization. Through implementing some of the proposed improvements in the exploration, Jigseye already applies this approach a little.

Furthermore, changing and optimization in the early stage of the design implementation is more practical to do than in the live App; it is easier changing a pencil drawing erasing some lines compared to adjusting coding and digital design in a live version., also considering the needed effort to do so.

Finding out about user needs and points for optimization early/now could minimize and even prevent unexpected, large investments in making these changes later on in the design process. Especially when the outline for the design has already been established, it is more costly to have to start over, meaning all the resources spent are wasted. Staying in touch with the target user group is paramount; in being able to design for them, you need to know what it is they need. (through) Continuous design testing



and validation, including user research creating an iterative design process, can largely benefit the design process. Also, justifying and assuring that what you are creating still aligns with the users needs you to design for. The benefit of an iterative design process is found in a constant validation of the design choices made, optimization in overseable steps with clear direction, with overall less risk of a sudden large investment of resources, leading to a better fitting and value of the end product for the user.

Also, a benefit of user research, as proven through this project, is the finding of new opportunities and uncovering of potential risks that can be of high value, influencing the final product outcome.

Another reason to continue efforts in user research is to Resulting in an improved final product presented at launch for the user. Of course, there is no foolproof way of creating the perfect finished product before launching it. In UX/UI design, you are never really done; there is always room for optimization with new technological innovation, competition, the need to keep up with new trends and to change user needs.

Overall, the in Appendix 10-mentioned points, of which some I encountered in this project and some from which I learned about previous projects, argument for importance of doing early on product development and user research

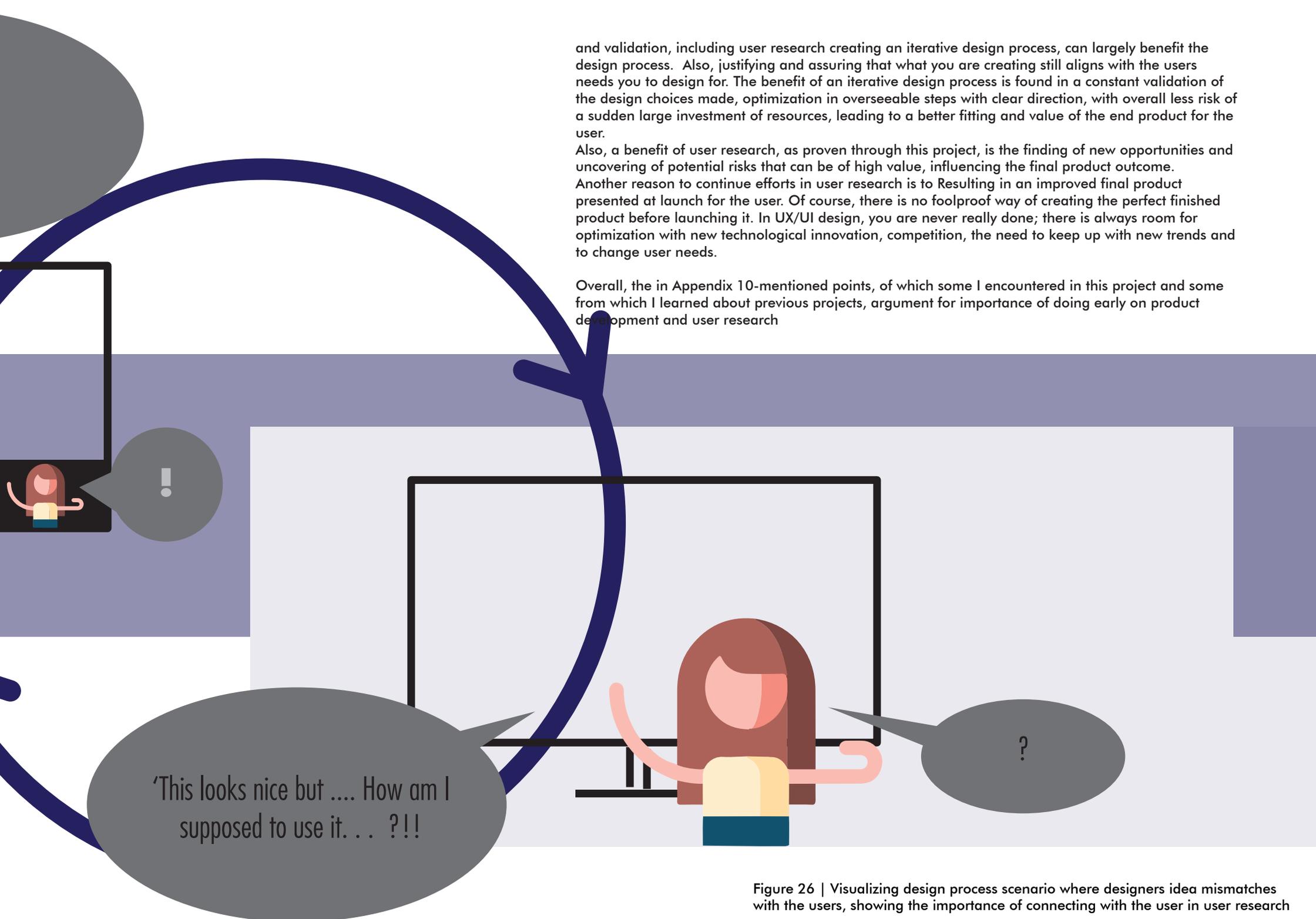


Figure 26 | Visualizing design process scenario where designers idea mismatches with the users, showing the importance of connecting with the user in user research

PROPOSAL TO FURTHER THE DEVELOPMENT OF DESIGNS

next steps for design is 3 direction usertests



IMPRESSION (STYLE + CONTENT)

- focussing on how the user experiences the display, layout, orientation and design of the App. The hi-fi designs provide a near realistic preview of the apps look and feel for the (future) users to gain direct specific input. Through showing the users a preview to provided feedback on, gaining insight on colour to visuals and text readability to specific content.



INTERACTION (HIGHLIGHTS + BUTTONS)

- to consider looking at whether the user recognizes the purpose of buttons and highlights, using them as envisioned, developing an understanding of the user's interactions. Using hi-fi designs or an interactive prototype are both possibilities to do so. Important is the interaction of moving through the screens. The interaction scenarios allow the user to then 'play' as if they were selecting a button; by tapping on the designs with their finger mimicking digital interaction. The researcher oversees and directs to continue the interaction scenario, providing the next app screen to the user.



USER EXPERIENCE (PATHWAYS)

- Important is the action of moving through the App screens, e.g. using the hi-fi scenarios similarly as described in the interaction test. Using the interactive prototype in user-scenario play, creating a nearly realistic feel to capture the user experience. For this test objective, the hi-fi designs need to be translated to an interactive prototype, for example, using tools such as Adobe XD and Axure, allowing to simulate button feedback, scrolling effects and intricate use interactions. Simulating dynamic content is possible, e.g., creating the changing content on the home page and news page content. It is up to the researcher to decide how far to go in prototyping the app features. It is possible to prototype the App fully. However, it takes more effort to build and questions its value for the research. Therefore, proposing to focus on one feature at a time, for example, the My page.

Continuing App development

As pointed out in the previous paragraph, the importance of doing user research and its value to design shown throughout this project, I propose to continue development efforts.

The first research initiatives yielded valuable insights, gaining a better understanding of the user's needs resulting in design development. Following up on the first user-research study and feature design for the SPM App tool, the new designs go through the second round of user testing, focusing on the usability of the new features through user experience testing.

Next steps for design development

Similar to the user-research points to focus on in testing:

- content recognition and style experience
- intuitive interaction flow between features aka pathway's (how the pp is build up)
- ease of use in interaction experience reacting and interaction on feature feedback, e.g. you input the program responds, how a button shows that you click it and use of features response

Based hereon, defining 3 directions for research initiatives:

- 1 impression (style + content),
- 2 interaction (highlights & buttons),
- 3 user-experience (pathways).

These are overarching themes to look into for the whole design. It is interesting to focus on the new features useability, specifically the My page, Overview, News and Home. Specific test goals for each of these features considering:

- FOR THE MY PAGE; the ease of quick updating using the Upcoming deadlines feature and the added value of the indicator view
- IN THE SPM OVERVIEW; the attractiveness of the additional strategic information for all users inviting exploration and added value of the Update box with the progress indicators specifically in the SPM Meeting
- WITH NEWS PAGE; stimulating involvement through the idea box usage and improving strategic awareness through engaging with the content
- THROUGH THE HOME PAGE; to stimulate exploration of the SPM App content for all users and supporting the intensive users in quick updating and personalized goal-oriented navigation.

For the user interaction experience testing, the UX manual by Herrera and van der Lelie (2018) is used as a basis. Herein, using the hi-fi designs resulting from the design phase as a starting point for research. The visual on the left goes into the proposed application of the designs for the 3 test directions.

Continuous optimization

Besides the further development of the App design, I advise also put effort into continuous development. This entails staying up to date with the changing user needs and digital trends, such as visual style. To illustrate, Microsoft and Adobe have regular updates of their applications software to run more smoothly. They also create new features and adjust the style and looks of their products to match the latest design trends applied to their brand image. The changes are often limited to one or two new features or style changes so that the user can adapt them easily. Important to note is that with continuous development, it is all about implementing fast and regularly, being a constant effort. In my opinion, I highly appreciate these minor regular updates keeping the product exciting and looking fresh to the user.

What to implement first?

A good question to ask at this point in the design process is which feature to implement first? This chapter touches upon resource availability, Jigseye's current development direction, user preferences and reviews the value of the features. To do so, using the matrix as in the insights mapping. Logically not all features can be developed at the same time. There are not enough resources such as developers and funds readily available to facilitate this pressure to execute. Nor would it be time-efficient, as it will take much longer to develop and implement all features simultaneously, e.g. to launch in one App version update. The next update would become available in another five years, which does not benefit the users nor Jigseye.

Going for smooth optimization

So then what to select first? The right aspect to look into is which feature would fit with Jigseye's development initiatives and support the user's needs.

In order to investigate this, the analysis evaluates each feature specifying value and risk; enclosed in appendix 10.3 and 10.4 Implementation roadmap, is the complete study hereon. The results are set out against Jigseye's efforts&desires and the users desires&needs, re-creating the value mapping from the chapter 3 Conclusion.

Looking back at earlier chapters, such as in the cross-check paragraph, the users and Jigseye's motivation for the current and future vision for the App came forward. To re-cap, the current effort focuses on 'bug fixing' and smoothing out the experience, meaning that they direct their attention to optimizing small elements. Their long-term goals for the App are a desire to seeing what is possible, going into a more radical direction.

As found from the research, the users expressed desires such as visual motivation, brand recognition and feature expansion implying small changes. They need ease of use in inputting, strategic communication, and involvement, pointing towards new purposes and interaction experience.

In the visual, the new App features are mapped out in these four directions. The positioning reflects the relation of the designs to the insights: A shift in focus, The App is more than an App and A desire for more.

Considering the orientation of the insights and the feature designs in the mapping, 'Hot zones' are discovered. These highlight the area's showing the prominent directions for implementation. There are two areas defined from high feature activity;

The first area takes into optimization aligning with Jigseye's initiatives, targeting incremental innovation, including the features Homepage, Logbook and SPM Overview page incorporating the insight of a desire for more through the herein proposed feature expansions for smooth interaction.

The second area focusses on new feature design and adding purpose to the SPM App, by radical innovation directly addressing the user needs relating to a shift in focus through the My page feature and the News feature targeting the involvement of the organization as a whole linking to the insight of the App is more than an app.

To summarise, it comes down to deciding to either first; put short term effort into quick feature optimization attaining direct user value through a smoother experience, or double down on effort going for new feature development, creating value over the long term by facilitating in the user's needs. At this point, with the current insights, I propose to initially continue towards a smooth experience aligning to Jigseye's current direction with the SPM App while addressing some of the user's problems. A functioning app is valued more important than new features. By first optimizing features, it provides time for further development and user testing of the My page and other new features and to ensuring their value to the user. The results of this study are taking into the roadmap implementation proposal, moreover on the following page.



Future desire

future plans for the app, long term exploring the possibilities for the app moving to extremes



Needs

Low threshold interaction ease in updating experience security feeling overview



New App designs

The main features of the My page, SPM Overview, News page Design optimization of the Logbook, Homepage and Project page

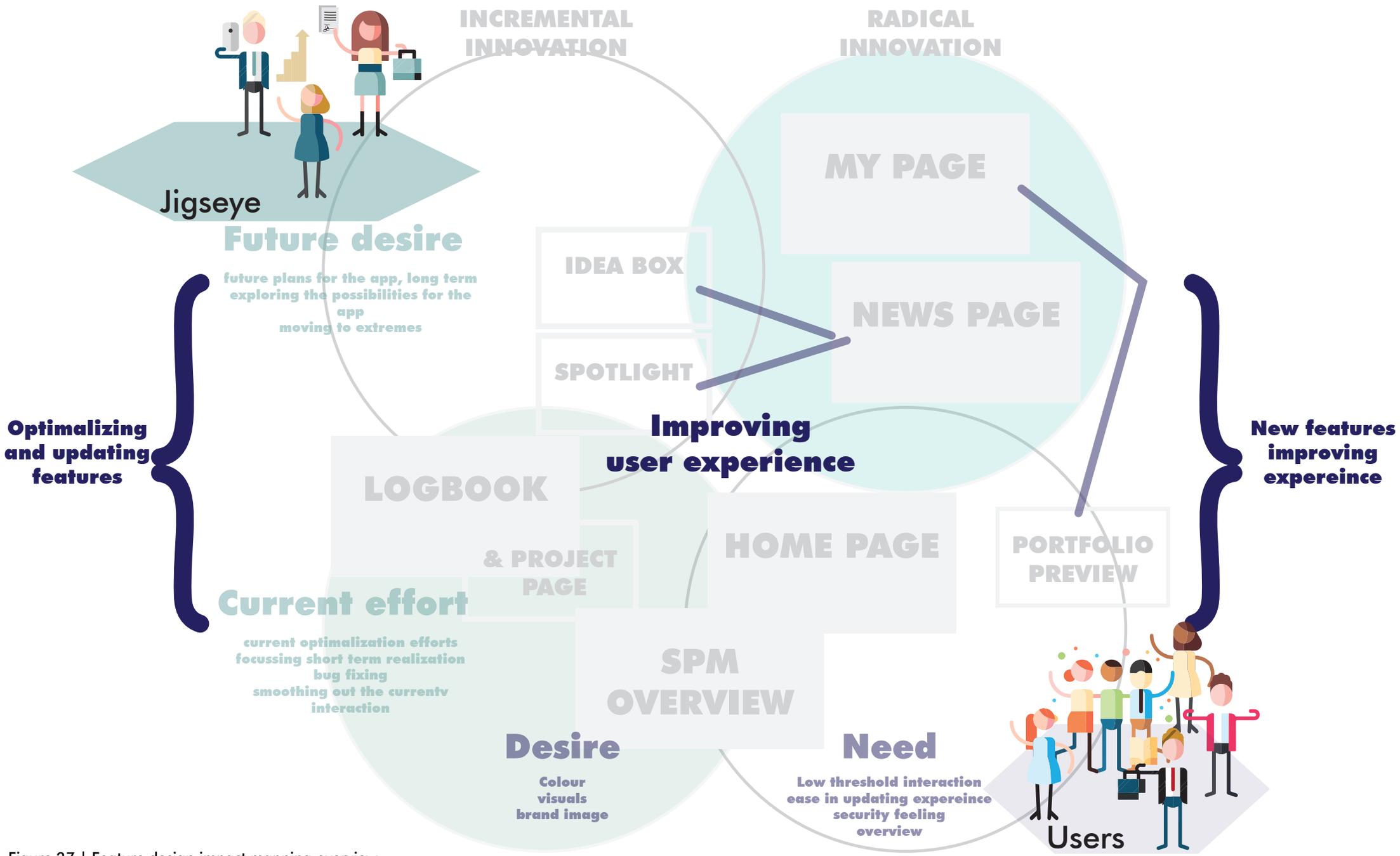


Figure 27 | Feature design impact mapping overview showing Jigseye and users value, highlighting area's of interest



Home page

Use home page as a preview tool to test out other features. For example try out the features for the news page and My page such as the my actions quick-update function and notifications. Also to let users get used to the new way of working.

The new home page will also provide easy navigation and in doing so improve the overall user interaction experience.

STEP 1 smooth experience

Implementing small optimizations and implement the new layout for the app design including the Jigsey feel of fresh and light with the client brand style look . gives quick value and users experience satisfaction. can be readily done. At the same time while developing the Home page.

Look, feel & smooth exp

Three-step implementation roadmap

Concluding to first go into implementation for a smooth user experience, followed by new feature development, a general indication for a roadmap can be established. This paragraph outlines the implementation roadmap steps proposal.

Before going into the roadmap, a note of caution. The aim is to provide an overall idea of the features implementation sequence. Therefore I made assumptions based on the size of the feature, e.g. the news page has a lot of functions facilitated by various features that consist of many different elements that each supported by different data from the App, making it a more complicated tool compared to the logbook page—in combination with the previous analysis, resulting in the roadmap visualization. The end of this paragraph briefly returns to this topic.

The roadmap works towards the overarching goal of creating ease of use on interaction experience; consisting of 3 general steps, each targeting a specific area supported by the features:

Step 1 is about creating a smooth experience aiming for attaining quick value and user satisfaction through improving the look and feel of the App (brand style & logbook update) and addressing feature optimization such as implementing the new home page, overview and logbook. The argument for implementing the homepage first is that the other features can be previewed and tested out through the home page. The overview and logbook feature mainly provide supportive features for inputting and content navigation.

Step 2 focuses on the intensive user needs addressing the main activity and purpose of the App on inputting and updating through the App with the implementation of the new My page. Additionally, it introduces the idea box, also part of the inputting initiative involving the organization to partake in sharing project ideas. The My page is a relatively large new feature as it consists of 3 dedicated versions, one for each intensive user group. Therefore a whole phase is dedicated to this focus expected to take more effort to implement.

Finally, step 3 dives into the new purpose of involvement and awareness going into developing the entirely new theme around the News page. Providing strategy-related content for sharing, communicating, and promoting contributing involves the organization in strategic goals toward raising awareness. Since this theme is of a supportive role to SPM and a new venture for Jigseye, there is no experience in this area yet. There is currently no pressure to implement this feature, allowing time to further develop the content and support while testing it as a feature preview on the home page. The steps are visualized on the roadmap, with the same colour referencing as used in the value matrix with the new feature proposals in grey and optimizations shown in white.

Further development of the roadmap

Jigseye is collaborating directly with an IT developer for in-app feature adjustments. They can provide insight, knowledge and indication effort such as coding, UI and resources needed to execute the designs. For further analysis, I propose to showcase these plans to them and working in co-creation to come to a finalized implementation plan, e.g. detailed overview on specific resources and time allocation working towards full implementation of the design proposal. I am not a developer and have no insight into how long nor how much effort it costs to realize one of these features; for this project, that level of detail is out of scope. I consider this an opportunity for future continuation efforts.

STEP 2 inputting

My page

The next feature should be the my page seeing as this fulfills the direct user need of satisfying easy inputting and overview to the user.

the reason for this to be implemented second is because it is a large feature consisting of many elements that need time for development. also using the homepage to test it out is a smart way of measuring user response to the new feature. This also works as a preview effect, making transitioning more smooth and easier to use the new My page after being familiar with it from the homepage.

STEP 3 involvement & awareness

On the home page a preview of the news page can already be tested out, the spotlight feature is there a great opportunity for.

this is also the point at which it becomes interesting to invite the whole organization into the app, before this point there is not yet content for the mto enjoy, the news page will have so and boost the app. (before it would be boring and no body would look twice)

Spotlight

Implementing the supportive features for the My page: the logbook and project page. these are mainly style and layout optimizations for which the content is readily available

Overview & Logbook

same goes for the idea box that can be readily used via the home page, supporting the SPM effort through open idea inputting by the organization

Idea box

News page

On itself the news page can be considered an additional feature mainly to boost experience of the app and thus has less priority.

Furthermore the news page is a completely new theme for which content and input needs to be prepared and maintained, in collaboration with the client.



5

CONCLUSION

At the beginning of the story, we start with the Jigseye SPM processes that journey. With them, new tools were introduced, continuing into user research unveiling new insights based on which the new design proposal is formed. With the design finished, the implementation proposal ready, and a clear line of the next step for the design, the project could be considered satisfied. Going back to the beginning, I set out to create the new journey into Strategic Portfolio Management and successful implementation through new tool design for useability. There is one more aspect to completing this project. The final step of the project is bringing everything back together into the new SPM journey. This chapter introduces the new SPM journey, including the new steps for tool implementation visualized on the right. The following paragraph will zoom in on the designed steps for the SPM App tool in the new journey.

This chapter looks back at everything so far. It takes into the final design for the SPM App and a new way of working, connecting them to the SPM Process journey. The result is the new SPM Journey. Briefly is touched upon the new steps represented in this journey followed by a quick analysis of new opportunities and risks. Continuing on the newfound risk of staying relevant for Jigseye, addressing the issue by assessing three directions for further design and leading to proposals into new service opportunities for Jigseye, providing detailed designs on how these service initiatives could take shape. Finalizing the project with assessing the novelty and value of this project in the greater context in conclusion.



Bringing everything together

The goal I set out with is Enhancing the process of strategic transformation through effective SPM, which focuses on extending and completing the StrategicPortfolio Management [SPM] process. Leading to the vision of Creating the new journey into Strategic Portfolio Management and successful implementation through new tool design for useability. —accelerating the SPM execution through looking at the process as a whole, by (creating the before and after) designing the EASE IN and SUPPORT AFTER and doing so by designing for the useability of the new SPM tools that through implementation will provide in starting with and execution of more effective/successful SPM. Creating the new journey into Strategic Portfolio Management and successful implementation through new tool design for useability

To understand the new journey, let's re-cap on what the SPM journey entails, point out where the new tool designs impact and what new steps they introduce.

The SPM Journey

Here I continue my earlier work, implementing the design of the new tools. The newly found process steps are based on user research and tool design. The resulting journey is visualized on the right.

Also including herein are the phases that arise through implementing the design proposal of the new app features and mobile app version—briefly highlighting the positioning and expected influence on the journey, view the detailed journey design in appendix 4.3

Figure 28 | The New SPM journey, abstracted service steps and process interaction with the SPM tools (views also preview page)

In summary, the vision is laid out in the form of a journey, leading to new opportunities. This will increase both the effectiveness and efficiency of the SPM tools. They improve and extend Jigseyes SPM process.

The new tools have a new way of using them; in doing so, new interaction steps are envisioned and designed, which are incorporated into that process journey. All together, creating the new SPM Journey.

The next page goes into detail on the journey steps for the SPM App. Furthermore, the new process creates new opportunities for Jigseye, such as within the review and evaluate step, moreover on the following pages.

Getting started & Implementation



Rise of a new risk: staying relevant

Quick intro into found risks: with digital app a large part of the service side of Jigseye is influenced, for one the change of handing out the physical framework/transition wall tool to the digital link to the app, second in best case scenario with the app in place the organization can manage everything themselves not needing Jigseye to do anything for them (provide own input, have overview, make decisions = continuous circle that they sustain themselves).

SO a central question becomes what service can Jigseye offer in addition to the app also taking in mind to maintain their value to the clients and in some way still bind them to jigeyee so that they keep being relevant, after all it still is a business (model making money).

Staying relevant, developed 3 potential key points where Jigseye can make an impact. found from combining the findings from the research and user journey analysis . Each point taking effect in a different part of the journey, ensuring Jigseyes engagement throughout.

Risks create opportunities

Several aspects come to light in evaluating the new SPM Journey in detail, as shown on the previous page. Especially when looking at the journey and the herein defined 'break off' points, where clients can leave or continue on their own at various points after having received the sessions and Framework resulting from there. Staying relevant develops into three potential key points where Jigseye can impact, found from combining the findings from the research and user journey analysis. Each point is taking effect in a different part of the journey, ensuring Jigseyes engagement throughout.

GETTING STARTED

What would the implementation service of Jigseye be like: Focuses on getting the basics right, meaning the establishment of the Framework, implementation of the new way of working with the SPM methodology and mindset in combination with using the app herein.

This service would impact the beginning of the execution of the SPM framework (directly after the sessions). The emphasis on instructing and supporting a smooth transition towards the SPM methodology in the organization, including the app's adoption by the organization.

One of the actions already employed in this area is the launch event, a getting started meeting with how-to instruction.

Monitoring & pro-active longterm involvement



Client involvement in further development



PRO-ACTIVE MONITORING

What would a monitoring service of Jigseye be like:
Thanks to the implementation of the app, Jigseye has continuous insight into the clients' organizations activities, moving towards monitoring services.

One aspect Jigseye can use this for is to look into the execution of the methodology; do the user update the deliverables on time and respond to, for example, bottlenecks according to plan.

Supporting herein is the second aspect of whether the client is using the App sufficiently, e.g. whether a user is accessing the App, providing input, make regular updates and more; to keep the app data up to date with the organizational progress.

The third is proactively supporting the organization towards successful SPM for Jigseye being first to alert the organization, e.g. directly on insufficient use or indirect prompting for the suspected need to re-evaluate the Framework if it is no longer in line with the strategic goals. The App can facilitate collecting, recording and analyzing user data so that Jigseye can analyze to interpret and act upon.

CLIENT INVOLVEMENT

What would the client involvement service of Jigseye be like:
Coming from the users' reaction to the user-research, they all were enthusiastic about being involved in the development process.

Aiming to improve user experience through involvement, yielding positive reactions for both their concerns being heard and making them aware that Jigseye cares.

Actively reaching out to the users (all users); checking in with the users' experience of the App through personalized emails promoting them to share concerns, problems and feedback.

The next steps could be early access to preview updated versions of the App and to request honest input, active involvement in user research of a 2.0 version of the App similar to the research in this project, and even extending to co-creation with the users.

Discussion

Critically assessing this project, there are many opportunities to be found for continued studies. Some have already come to light in this report and are elaborated on in the project process Appendixes. Summarized, these are the three most important:

This study is limited by the novelty of the SPM App tool. At the start of this project, the tool was still being developed and not ready for use.

The user research considers the beta version user experience with the first organization at which this tool was implemented; Only within this organization data is collected. Reflecting on these events, the outcome is a case study on the user interaction experience with the SPM App tool of that organization.

Reviewing the generalization and validation of the insights is limited by this context, as earlier mentioned in the research limitations.

This project already takes the first steps towards validation of the findings through the cross-check analysis. Herein involving the representatives of three other client organizations implementing the SPM Tool, looking for the reoccurrence of the research findings within their organizational context. However, this evaluation only considers limited scope.

A key aspect for recommendations is expanding the research towards involving other client organizations.

At this moment, the SPM App tool is being widely implemented at Jigseye clients. They are now making it possible to widen the research scope. The user researches and cross-check analysis as proposed in this project can provide the basis for follow-up research efforts. Aiming for generalizability of this projects insights, by comparison, and observation hereof at other client organizations of Jigseye. Furthermore, seeking to broaden understanding of users experience with the SPM Tools in various business context applications.

Continuing this direction, it is interesting for Jigseye to consider analyzing the process and experience of tool implementation for new clients with no prior experience in SPM.

Besides expanding the user research efforts, it is essential to follow up on validation of the design outcome. Looking into implementing the proposed directions for the design outcome towards continued development efforts, as stated in chapter 4 Implementation.

In conclusion, because at the time, the tool was only implemented at one organization, this project became a case study. Follow-up studies can expand the user research efforts, broadening the perspective on the user experience with the SPM tools in various business contexts, and validate the new design for the SPM App tool.

What is the value of this project to others, extending beyond this project

Shows importance & influence of (not)doing user research in early design development process

Being creative with research: combining methods and my aim to make usertesting more interesting/fun for both parties

My idea of strategy communication: The news page design

How this experience helped me grow: my understanding of the bigger picture



Covid-19 influences on business & SPM

Covid effects/creates push for digitalization

Doing userresearch in Covid-19 time

How I survived GP in Covid-19 times: staying connected at home

Learn from my mistakes and how I when about them

Conclusion

This project centres around the user research into Jigseye's new SPM App tool; the three main insights of 'A shift in focus, 'A desire for more' and 'The App is more than an App'. Designing for the intensive user group needs, adding functionality and new purpose of stimulating strategic portfolio management involvement and awareness for the whole organization, respectively. My design creates value to SPM by designing the three features to the SPM App tool; the My page, Overview and news page. The extension of the tool towards a mobile version. Finally, the project vision takes on the form of establishing a new SPM journey, leading to new opportunities for Jigseye to expand its services. This will increase both the effectiveness and efficiency of the SPM tools.

The novelty of this project;

- First user research with new SPM App tool of Jigseye
- Observing and reporting the influence of Covid-19 on Business and SPM
- Doing research during Covid-19

Placing this project in a broader context considering value for Jigseye, further business, users and SPD Students.

- Jigseye

This project provides Jigseye with insight into the user experience with their new tools. User research showed the weaknesses of the physical tools. Through observation and user experience testing provided knowledge on what the user wanted and needed. This leads to extending current tools by developing and designing the new SPM App tool and new SPM journey interaction.

- Future businesses and users

The user study proves the importance of accessibility, open communication and X to successfully attaining SPM implementation.

- SPD Students

This project shows how an SPD student can contribute to business by critically assessing the process of implementing a new tool in business organization and management to be used by the whole company. As an SPD student, by not just looking into user research and product design and including implementation, the whole journey and evaluating new risks and opportunities. With this mindset, looking at the whole picture, grounding the design, it becomes more realistic.

REFERENCES & APPENDIX

Overview of design methods used over this project
References
Appendix Index

(DESIGN) METHODS APPLIED

A brief overview of the chapters and methodologies and design approaches/ practices used herein.

INTRODUCTION

Project progress journey

1 CHAPTER INTRO

Context explanation: overload & Jigseye's Solution

literature study into understanding: Jigseye's SPM tools

Jigseye SPM Approach analysis

SPM process Analysis

Process and Journey mapping

Tool study (through client case evaluation)

project brief formulation

Project goal and vision statement

2 METHOD

Stakeholder identification and mapping

SPM App exploration
Design Peer testing approach
UI/UX testing methodology of reviewing digital design
exploration reflection
Initial identification and optimization designing

Qualitative research approach:

- research guide design
- designing for reproductivity of the research

doing extensive user research under covid-19 circumstances:

- observing
- individual interviewing
- laddering principle approach
- user interaction experience testing
- 5-sec test impression approach
- emotional blueprinting theory approach

collaborating with real live business users

Data collection & analysis:

- transcribing
- coding & focused coding
- mapping &
- 5-sec test impression test analysis
- emotional blueprinting and analysis
- user research design in covid -19

doing user research in covid-19

Analysing Influence of Covid on business & SPM

eliciting insights from research

Re-evaluation design leads

Cross-check study: generalization & validation of findings

From research into design: Conclusion

3 DESIGN PHASE

UX/UI design approach

interaction visioning

design challenge

new feature ideation and concept design (design iterations)

new usergroup identification and mapping

Digital design, designing the PC and Mobile SPM App version

new brand style creation: analysis, development and design
(including iterations)

design drawing and visualization:

- low-fi initial designs
- hi-fi designs
- interaction scenarios design & interaction visualization

new way-of working designing

4 IMPLEMENTATION

branding course: how to build a brand, brand building guide

Naming masterclass lecture

Digital web design for App branding on website

Implementation evaluation & roadmapping

5 CONCLUSION

New journey design

story scenario design

Service blueprinting

new opportunity & risk analysis

new opportunity design: service pack design & marketing loyalty
strategy

New opportunities for Jigseye: the service pack extension

Discussion: opportunities for further development

Conclusion

Appendix, project process report

REFERENCES

Over the course of this project a lot of information has been gathered and used. Throughout the process the main focus is on gaining information through practical studies, such as the tool exploration and the user research.

In order to understand them and do so supportive information is gathered through literature, establishing a base of knowledge to work from. These additional materials are an invaluable source and contribution to my knowledge in the process of understanding and gaining insight into SPM, the tools, doing user research and analyse, design practice and more. Also considering the experience and knowledge gained through my years of study at the TU Delft are a huge support, building up to this project. Functioning as background understanding, most are not actively mentioned through this report. Even so, I do recognise the impact and value they contribute to creating this project and personal growth.

Here a brief overview of the theoretical literature used in this report.

Bitner, M. J., Ostrom, A. L., & Morgan, F. N. (2008). Service Blueprinting: A Practical Technique for Service Innovation. *California Management Review*, 50(3), 66-94. doi:10.2307/41166446

Boeijen, A. V., Daalhuizen, J., & Zijlstra, J. (2020). *Delft Design Guide: Perspectives-Models-Approaches-Methods*. Amsterdam: BIS.Charmaz, K. (n.d.).

A.G.C. van Boeijen, J.J.M Zijlstra and R.S.A. van der Schoor (eds.) (2013). *Delft Design Guide*. Amsterdam: BIS Publishers

Charmaz, Kathy. (2011). *Grounded Theory Methods in Social Justice Research*.
2013 Sarah J. Tracy, S.J. (2013). *Qualitative research methods*. Blackwell Publishing

Corbin, J. & Strauss, A. (2008). *Strategies for qualitative data analysis. Basics of qualitative research* (3rd ed., pp. 65-86). Thousand Oaks, CA: SAGE.

Demir, Desmet & Hekkert (2009). *Appraisal patterns of emotions in human-product interaction*.

Desmet, P. M. A. (2018). *700+ Product Emotions*. Delft: Delft University of Technology.

Desmet, P. M. A. (2019). *Design for Emotion course manual*. Delft: Delft University of Technology.

Ansoff, H.I., Leontiades, J.C. (1976, September). *Strategic Portfolio Management*. *Journal of General Management*

Garfein, S. (2021, July). *Strategic portfolio management at Hydromax: Closing the Gap between Strategy and Results-A case study*

Herrera. n.r. van der Lelie. C. (2018, February). *Interaction & Electronics. Course manual*. Delft: Delft University of Technology.

Hultink, E. J., & Schoormans, J. (2004). *Productontwikkeling en marketing*. Place of publication not identified: Pearson/Prentice Hall.

de Jong, A.M. Kanis, H. Rooden, M.J. Vermeeren, A.P.O.S. (2006, January). *Observational research*. Delft: Delft University of Technology.

Reconstructing Grounded Theory. *The SAGE Handbook of Social Research Methods*, 461-478. doi:10.4135/9781446212165.n27

Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory Strategies for Qualitative Research*. Aldine de Gruyter, 1967

Glaser, B. G., & Strauss, A. L. (2017). *Applying Grounded Theory. The Discovery of Grounded Theory*, 237-250. doi:10.4324/9780203793206-13

Kester, L. (2011). *New product development portfolios: Identifying the antecedents and consequences of decision-making processes (Unpublished master's thesis)*. Diss. Delft.

Lunsford, J. L. (2006, June 13). Piloting Boeing's new course Wall Street Journal 247(137) B1-B3.

Markham, S. K., & Lee, H. (2013). Product Development and Management Associations 2012 Comparative Performance Assessment Study. *Journal of Product Innovation Management*, 30(3), 408-429. doi:10.1111/jpim.12025

Markham, S. K., & Lee, H. (2013). Product Development and Management Associations 2012 Comparative Performance Assessment Study. *Journal of Product Innovation Management*, 30(3), 408-429. doi:10.1111/jpim.12025

Reddy, V. (2020, August 31). What is a 5-second user test and how can it help you in the design process? Retrieved from <https://uxdesign.cc/what-is-a-5-second-user-test-and-how-can-it-help-you-in-the-design-process-4cc43c88e1ad>

Sanders, E. B., & Stappers, P. J. (2018). *Convivial toolbox: Generative research for the front end of design*. Amsterdam: BIS.

Stankovic, L., & Djukic, S. (2015). Strategic innovation portfolio management. *Marketing*, 46(4), 252-262. doi:10.5937/markt1504252s

Tracy, S. J. (2020). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. Hoboken, NJ: Wiley Blackwell.

Supporting materials

Jigseye and SPM process and tools through client cases documentation
Kester, L Schasfort, S (2018, November). Speed up execution of your strategy. Report
Kester, L (2020, May 19). Execute your strategy: make effective IT decisions. Masterclass
Strategic Portfolio Management: Model & Canvas
Work instruction: Transition flight manual. client A
Flightboard manual. client B
Work instruction: Transition flight manual. client C
Jigseye, Accelerate your strategy execution. Powerpoint report
Jigseye (03-10-2018). Applicatie opzet. Powerpoint report
Jigseye's website: <https://Jigseye.com/>

supporting in my overall research and design efforts

Sanders, E. B., & Stappers, P. J. (2018). *Convivial toolbox: Generative research for the front end of design*. Amsterdam: BIS.

Herrera. n.r. van der Lelie. C. (2018, February). *Interaction & Electronics*. Course manual. Delft: Delft University of Technology.

TU Delft design guide for various analysis and design approaches used throughout this project
A.G.C. van Boeijen, J.J.M Zijlstra and R.S.A. van der Schoor (eds.) (2013). *Delft Design Guide*. Amsterdam: BIS Publishers

Appendix

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The process report functions as the appendix to his project report, it outlines and details into all the actions and activities undertaken during the course of this project.

The process around this project is quite extensive and to that end not everything made it into this final report. The process report provides a complete telling of these process steps and how they contributed to establishing the final result of the design process.

I highly recommend that you leave through the process report, there are a lot of nice visuals to look at and you easily get an overall idea what steps I took to get to this point.

Happy reading and thank you for staying all the way through to the end!

